

# **Compound Screening Libraries**

Optimized for drug screening and new indication research

Bioactive Compound Library
FDA-Approved Drug Library
Anti-Cancer Compound Library
Kinase Inhibitor Library
Epigenetics Compound Library
GPCR/G Protein Compound Library
Clinical Compound Library
Anti-Infection Compound Library

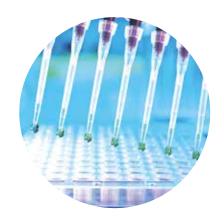
www.MedChemExpress.com

# Bioactive Compound Screening Libraries (96-well)

Our ready-to-use MedChemExpress (MCE) compound libraries consist of over 4000 small molecules with validated biological and pharmacological activities. They are available for high-throughput screening (HTS) and high-content screening (HCS). Compound libraries are useful professional tools for drug discovery and new indication research.

- Safety and effectiveness have been confirmed by literature, patent reports and clinical research. Many products are FDA-approved.
- Focuses on hundreds of targets that are **key components** in the fields of GPCR, kinase, anti-cancer, epigenetics, stem cell biology, etc.
- Up-to-date with the latest medical molecule developments and offers access to our exclusive Clinical Compound Library.
- **Detailed biological and chemical information** are provided for every compound together with the LC/MS and NMR reports to ensure high quality.

We offer **over 300 exclusive compounds worldwide** and track the latest scientific innovations to give our customers access to **the newest** small molecules. We are dedicated to providing **high-quality small molecules** to our customers around the world.





# **Customize Your Library**

MCE offers customized compound libraries based on your specific needs.

You can select compounds, format (powder/liquid), size and plate map depending on your requirements.



Specific Compounds



Ouantities



Plate Map



Concentration



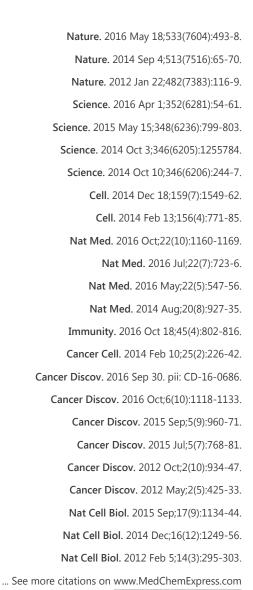
Format (Dry/solid

or DMSO Solution)





# **Publications Citing Use of MCE Products**









# **MCE Screening Library Partners**









Institute of



































Shanghai Institute of Materia Medica, Chinese Academy of Sciences

















# **Table of Contents**

Hot	Bioa	Bioactive Compound Library						
Hot	FDA	A-Approved Drug Library		02				
Hot	Anti-C	ancer Compound Library		03				
	Hot	Kinase Inhibitor Library		04				
Hot	Epiger	netics Compound Library		0.5				
Hot GP	CR/G Pr	otein Compound Library		06				
H	ot Cl	inical Compound Library		07				
Hot	Anti-Infe	ection Compound Library		08				

09	Antibody-Drug Conjugate-Related Compound Library
10	Anti-Virus Compound Library
1:	Apoptosis Compound Library
12	Cell Cycle/DNA Damage Compound Library
13	CNS-Penetrant Compound Library
14	Histone Modification Research Compound Library
15	Immunology/Inflammation Compound Library
16	JAK/STAT Compound Library
17	MAPK Compound Library
18	Membrane Transporter/Ion Channel Compound Library
19	Metabolism/Protease Compound Library
20	Natural Product Library
2:	Neuronal Signaling Compound Library
22	NF-ĸB Signaling Compound Library
23	PI3K/Akt/mTOR Compound Library
24	Protein Tyrosine Kinase Compound Library
25	Stem Cell Signaling Compound Library
26	TGF-beta/Smad Compound Library
27	Vitamin D Related Compound Library
28	Wnt/Hedgehog/Notch Compound Library

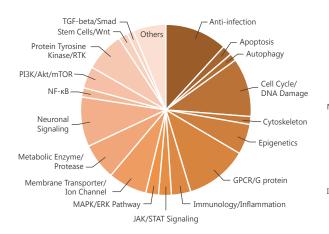
# Bioactive Compound Library Cat. No.: HY-L001

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solid	))
Bioactive Compound Library	HY-L001	3333	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

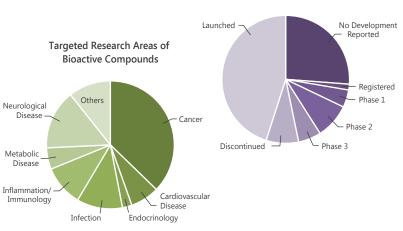
- · A unique collection of 3333 bioactive compounds for high throughput screening (HTS) and high content screening (HCS).
- Targets include RTKs, PI3K, Aurora Kinase, CDK, MAPK, and more.
- Bioactivity and safety confirmed by preclinical research and clinical trials.
- · Some inhibitors have been approved by the FDA.
- · Structurally diverse, medicinally active, and cell permeable.
- Detailed compound information with structure, IC<sub>50</sub>, and brief introduction.
- · Validated NMR and HPLC to ensure high purity and quality.
- · All compounds are in stock.

Targets Included in Bioactive Compound Library:						
5-HT Receptor	ACE	Adenosine Receptor	AChE	Adrenergic Receptor	Akt	Androgen Receptor
Angiotensin Receptor	ALK	Antibacterial	Antifolate	Antifungal	Antiparasitic	Apoptosis inducer
ATM/ATR	Aurora Kinase	Bcl-2 Family	Bcr-Abl	Calcium Channel	Casein Kinase	Cannabinoid Receptor
CDK	c-Kit	c-Met/HGFR	COX	Cytochrome P450	CXCR	DNA alkylator/crosslinker
DNA/RNA Synthesis	DPP4	Dopamine Receptor	EGFR	Epigenetic Reader Domain	ERK	Estrogen Receptor/ERR
FGFR	FLT3	GABA Receptor	GSK-3	Glucocorticoid Receptor	HCV	HDAC
HIF/HIF Prolyl-Hydroxylase	HIV	Histamine Receptor	HSP	Histone Methyltransferase	HSV	IGF-1R
IKK	JAK	LRRK2	mAChR	MDM-2, p53	MEK	mGluR
Microtubule/Tubulin	mTOR	nAChR	NF-κB	NMDA Receptor	OX Receptor	Opioid Receptor
p38 MAPK	PARP	PDE	PDGFR	PI3K	PLK	Potassium Channel
PPAR	Proteasome	Progesterone Receptor	Raf	Ras	ROR	SGLT
Sodium Channel	Src	Syk	TGF-β Receptor	Topoisomerase	TRP Channel	VEGFR

## **Targeted Pathways of Bioactive Compounds**



## **Clinical Phase for Bioactive Compounds**



# FDA-Approved Drug Library

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solid	l)
FDA-Approved Drug Library	HY-L022	1568	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

Cat. No.: HY-L022

- · A unique collection of 1568 FDA approved drugs for high throughput screening (HTS) and high content screening (HCS).
- · Applications in oncology, cardiology, anti-inflammatory, immunology, neuropsychiatry, analgesia, and more.
- · A research tool for new targets of old drugs.
- · All compounds have been approved by the FDA.
- Structurally diverse, medicinally active, and cell permeable.
- Rich documentation with structure, IC<sub>50</sub>, and summary.
- · Validated NMR and HPLC to ensure high purity.
- · All compounds are in stock.

Targets Included in FDA-Approved Drug Library:						
5 alpha Reductase	5-HT Receptor	ACE	AChE	Adenosine Receptor	ALK	Adrenergic Receptor
Androgen Receptor	Angiotensin Receptor	Antibacterial	Antifolate	Antifungal	Antiparasitic	Autophagy
Bcr-Abl	Calcium Channel	CaSR	Carbonic Anhydrase	c-Kit	c-Met/HGFR	Cytochrome P450
CXCR	DNA alkylator	DPP4	DNA/RNA Synthesis	Dopamine Receptor	EGFR	Endothelin Receptor
Estrogen Receptor	Factor Xa	GABA Receptor	Glucocorticoid Receptor	HBV	HCN Channel	HCV
HDAC	Histamine Receptor	HIV	HMG-CoA Reductase	HSV	Influenza Virus	JAK
Leukotriene Receptor	mAChR	mGluR	Microtubule/Tubulin	Monoamine Oxidase	nAChR	Neurokinin Receptor
NMDA Receptor	NNRTIs	NRTIs	Opioid Receptor	P2Y Receptor	PDE	PDGFR
PGE synthase	Potassium Channel	PKC	Progesterone Receptor	PPAR	Proteasome	Proton Pump
Raf	RAR/RXR	Ras	Sodium Channel	SGLT	Src	SSRIs
STAT	Thrombin	TNF-alpha	Topoisomerase	Vasopressin Receptor	VEGFR	Xanthine Oxidase

#### Publications Citing Use of MCE FDA-Approved Library Drugs:

Nature. 2012 Jan 22;482(7383):116-9.

Nat Med. 2016 Jul;22(7):723-6. Nat Med. 2016 May;22(5):547-56. Nat Med. 2014 Aug;20(8):927-35.

**Gastroenterology.** 2015 Feb;148(2):392-402.e13. **Sci Transl Med.** 2013 Jul 31;5(196):196ra99.

Eur Urol. 2015 Aug;68(2):228-35.

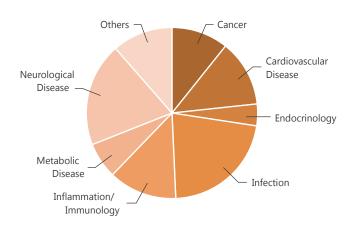
J Clin Invest. 2013 Sep;15:2012-14

Nat Commun. 2016 May 25;7:11724.

Mol Syst Biol. 2015 Mar 26;11(3):797.

...

## Principle Research Areas of FDA-Approved Drug Library



Tel: 609-228-6898 Fax: 609-228-5909 Email: sales@MedChemExpress.com

# Anti-Cancer Compound Library Cat. No.: HY-L025

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solic	1)
Anti-Cancer Compound Library	HY-L025	1248	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

- · A unique collection of 1248 bioactive anti-cancer compounds for high throughput screening (HTS) and high content screening (HCS).
- · Targets include kinases, cell cycle key components, tumorigenesis related signaling pathways, and other popular targets in epigenetic studies.
- · Bioactivity and safety confirmed by preclinical research and clinical trials, some have been approved by the FDA.
- Structurally diverse, medicinally active, and cell permeable.
- Detailed compound information with structure, IC50, and brief introduction.
- Validated NMR and HPLC to ensure high purity and quality.

Targets Included in Anti-Cancer Compound Library:							
5 alpha Reductase	Ack1	ADCs cytotoxin	Akt	Aldose Reductase	ALK	AMPK	
Antibacterial	Androgen Receptor	Antifolate	Apoptosis inducer	ATM/ATR	Aurora Kinase	Autophagy	
AxI	Bcl-2 Family	Bcr-Abl	BCRP	Btk	Casein Kinase	Cannabinoid Receptor	
Caspase	CDK	c-Fms	Checkpoint Kinase (Chk)	c-Kit	c-Met/HGFR	CXCR	
Deubiquitinase	DNA alkylator	DNA-PK	DNA Methyltransferase	E1/E2/E3 Enzyme	EGFR	Epigenetic Reader Domain	
ERK	Estrogen Receptor	FAK	Farnesyl Transferase	FGFR	FLT3	GSK-3	
HDAC	Hedgehog	Hexokinase	HIF/HIF Prolyl-Hydroxylase	Histone Demethylase	HSP	Histone Methyltransferase	
IAP	IGF-1R	IKK	IDO	Insulin Receptor	Integrin	IDH	
JAK	JNK	Keap1-Nrf2	KSP	MDM-2, p53	MEK	Microtubule/Tubulin	
MMP	mTOR	Myosin	Nampt	NF-ĸB	P2X Receptor	Nucleoside antimetabolite	
р38 МАРК	p97	PAK	PARP	PDGFR	PDK-1	PERK	
P-glycoprotein	Phospholipase	PI3K	Pim	PKC	PKD	Polo-like Kinase (PLK)	
PPAR	Proteasome	Raf	RAR/RXR	Ras	ROCK	Ribosomal S6 Kinase	
ROR	Sigma Receptor	Sirtuin	Smo	Src	STAT	Syk	
TNF-alpha	TGF-β Receptor	TLR	Topoisomerase	Trk Receptor	VEGFR	Wnt/β-catenin	

## Publications Citing Use of MCE Anti-Cancer Library Compounds:

Cell. 2014 Feb 13;156(4):771-85.

Nat Med. 2016 May;22(5):547-56.

Cancer Cell. 2014 Feb 10;25(2):226-42.

Nat Cell Biol. 2015 Sep;17(9):1134-44.

Nat Cell Biol. 2014 Dec;16(12):1249-56.

Nat Cell Biol. 2012 Feb 5;14(3):295-303.

Cancer Discov. 2012 May;2(5):425-33.

Cell Metab. 2012 Mar 7;15(3):382-94.

...

# **Customize Library**

- √ Specific Compounds
- √ Quantities
- √ Plate Map
- √ Concentration
- √ Format (Dry/Solid or DMSO Solution)

# Kinase Inhibitor Library

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solid	)
Kinase Inhibitor Library	HY-L009	588	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

· A unique collection of 588 kinase inhibitors/regulators for high throughput screening (HTS) and high content screening (HCS).

Cat. No.: HY-L009

- Target kinases include RTKs, PI3K, Aurora Kinase, CDK, PKC, VEGFR, ROCK, Raf, and more.
- Bioactivity and safety confirmed by preclinical research and clinical trials.
- · Some inhibitors have been approved by the FDA.
- · Most are ATP competitive.
- Structurally diverse, medicinally active, and cell permeable.
- Rich documentation with structure, IC<sub>50</sub>, and customer reviews.
- · Validated NMR and HPLC to ensure high purity.

Targets Included in Kinase Inhibitor Library:						
ACK1	Adenosine Kinase	Akt	ALK	AMPK	Aurora Kinase	ATM/ATR
Axl	Bcr-Abl	BMX Kinase	Btk	CaMK-II	Casein Kinase	CDK
c-Fms	Checkpoint Kinase (Chk)	c-Kit	c-Met/HGFR	DAPK	DDR1/DDR2 Receptor	DNA-PK
DYRK	Ephrin Receptor	EGFR	ERK	FAK	FGFR	FLT3
GSK-3	Glucokinase	Haspin Kinase	IGF-1R	IKK	Insulin Receptor	IRAK
ITK	JAK	JNK	LIM Kinase(LIMK)	MAPKAPK2 (MK2)	MEK	MELK
MNK	Mixed Lineage Kinase	р38 МАРК	PAK	PDGFR	PDHK	PDK-1
PERK	PI3K	PI4K	PIKfyve	Pim	PKA	PKC
PKD	Polo-like Kinase (PLK)	Pyk2	Raf	Ribosomal S6 Kinase	RIP Kinase	ROCK
Ros1	Salt-inducible Kinases (SIKs)	SGK	SPHK	Src	SRPK	Syk
TAK1	Trk Receptor	ULK	VEGFR	Wee1		

#### Publications Citing Use of MCE Kinase Library Inhibitors:

Cell. 2014 Feb 13;156(4):771-85.

Nat Med. 2016 Jul;22(7):723-6.

Nat Med. 2016 May;22(5):547-56.

Cancer Cell. 2014 Feb 10;25(2):226-42.

Cancer Discov. 2012 May;2(5):425-33.

Cell Metab. 2012 Mar 7;15(3):382-94.

Sci Transl Med. 2013 Jul 31;5(196):196ra99.

Nat Commun. 2015 Jan 21;6:6074. Mol Syst Biol. 2015 Mar 26;11(3):797. Leukemia. 2015 Jan;29(1):169-76. Leukemia. 2012 Oct;26(10):2233-44. Ann Rheum Dis. 2016 May;75(5):883-90. Cancer Res. 2014 Jan 1;74(1):15-23.

Elife. 2016 Apr 11;5.

Elife. 2015 Feb 10;4:e05178.

Clin Cancer Res. 2014 Dec 1;20(23):6034-44. Clin Cancer Res. 2014 Nov 1;20(21):5483-95.

••

04 | Tel: 609-228-6898 Fax: 609-228-5909 Email: sales@MedChemExpress.com

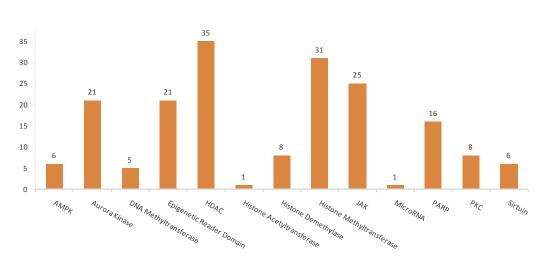
# **Epigenetics Compound Library**

Cat.	No.:	HY-	L005
------	------	-----	------

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solid)	
Epigenetics Compound Library	HY-L005	184	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

- · A unique collection of 184 small molecule modulators with biological activity used for epigenetics research and associated assays.
- The library contains inhibitors of epigenetic enzymes including Histone Deacetylase (HDACs), SIRTs, Lysine demethylases, Histone Acetyltransferases (HATs), DNA Methyltransferase (Dnmts), and SIRTs activators.
- · A variety of structurally and mechanistically different compounds are included.
- Bioactivity and safety confirmed by preclinical research and clinical trials.
- · A valuable tool for chemical genomics, epigenetic target identification in pharmacogenomics, and other biological applications.
- Structurally diverse, medicinally active, and cell permeable.
- Rich documentation with structure, IC50, and brief introduction.
- · Validated NMR and HPLC to ensure the high purity.

#### **Epigenetics Compound Library Composition**



## Publications Citing Use of MCE Epigenetics Library Compounds:

Nat Chem Biol. 2016 Jul;12(7):504-10.

Blood. 2014 Dec 18;124(26):3924-31.

Blood. 2013 Nov 21;122(22):3628-31.

Leukemia. 2012 Oct;26(10):2233-44.

Proc Natl Acad Sci U S A. 2016 Mar 29;113(13):E1898-906.

Cancer Res. 2015 Nov 1;75(21):4538-47.

Clin Cancer Res. 2016 Aug 24. pii: clincanres.1193.2016.

...

## **Customize Library**

- √ Specific Compounds
- √ Quantities
- √ Plate Map
- √ Concentration
- √ Format (Dry/Solid or DMSO Solution)

# **GPCR/G Protein Compound Library**

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solid	)
GPCR/G Protein Compound Library	HY-L006	483	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

Cat. No.: HY-L006

- A unique collection of **483** small molecules targeting G protein coupled receptors used in **GPCR screening for various research and drug development projects.**
- · Targets include 5-HT Receptor, Dopamine Receptor, Opioid Receptor, Adrenergic Receptors, Cannabinoid Receptor, mGluR, ETA-receptor, and more.
- · All of the small molecules in the GPCR library have well characterized biological and pharmaceutical activity.
- Structurally diverse, medicinally active, and cell permeable.
- Rich documentation with structure, IC<sub>50</sub>, and brief introduction.
- Validated NMR and HPLC to ensure the highest purity.

Targets Included in GPC	Targets Included in GPCR/G Protein Compound Library:						
5-HT Receptor	Adenosine Receptor	Adiponectin Receptor	Adrenergic Receptor	Angiotensin Receptor			
Bombesin Receptor	Bradykinin Receptor	Cannabinoid Receptor	CaSR	CCR			
CGRP Receptor	Cholecystokinin Receptor	CRTH2 (GPR44)	CXCR	Dopamine Receptor			
EBI2/GPR183	Endothelin Receptor	GHSR	Glucagon Receptor	Glucocorticoid Receptor			
GNRH Receptor	GPCR19	GPR109A	GPR119	GPR120			
GPR139	GPR40	GPR55	GPR84	Histamine Receptor			
Imidazoline Receptor	Leukotriene Receptor	LPL Receptor	mAChR	Melatonin Receptor			
mGluR	Motilin Receptor	Neurokinin Receptor	Neuropeptide Y Receptor	Neurotensin Receptor			
Opioid Receptor	Orexin Receptor (OX Receptor)	P2Y Receptor	Prostaglandin Receptor	Protease-Activated Receptors (PARs)			
Ras	RGS	Sigma Receptor	TSH Receptor	Vasopressin Receptor			

#### Publications Citing Use of MCE GPCR/G Protein Library Compounds:

J Allergy Clin Immunol. 2016 Feb 13. pii: S0091-6749(16)00085-3.

EMBO Mol Med. 2015 Mar 14;7(5):547-61.

Biol Psychiatry. 2016 Jun 9. pii: S0006-3223(16)32470-2.

**Hypertension**. 2014 Aug;64(2):369-77. **Hypertension**. 2012 Nov;60(5):1207-12.

J Neurosci. 2015 Jan 7;35(1):4-20.

J Med Chem. 2015 Apr 9;58(7):2958-66.

FASEB J. 2016 Jan;30(1):324-35.

Biochem Pharmacol. 2015 Jun 15;95(4):311-23.

...

**Customize Library** 

#### You can select:

- √ Specific Compounds
- √ Quantities
- √ Plate Map
- √ Concentration
- √ Format (Dry/Solid or DMSO Solution)

Tel: 609-228-6898 Fax: 609-228-5909 Email: sales@MedChemExpress.com

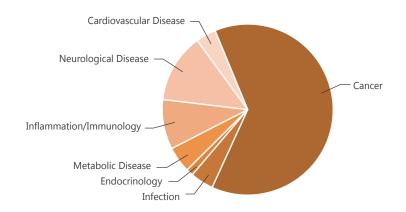
# **Clinical Compound Library**

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solid)	
Clinical Compound Library	HY-L026	1925	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

Cat. No.: HY-L026

- · A unique collection of 1925 clinical compounds for high throughput screening (HTS) and high content screening (HCS).
- Research areas include anticancer, anti-infection, anti inflammation, nervous disease, and more.
- Currently in clinical stage, some are withdrawn or terminated (updated in 2014) .
- Structurally diverse, medicinally active, and cell permeable.
- Detailed compound information with structure, IC<sub>50</sub>, and brief introduction.
- · Validated NMR and HPLC to ensure high purity and quality.

## Principle Research Areas of Clinical Compound Library



## Publications Citing Use of MCE Clinical Library Compounds:

Cell. 2014 Feb 13;156(4):771-85.

Nat Med. 2016 May;22(5):547-56.

Cancer Cell. 2014 Feb 10;25(2):226-42.

Nat Cell Biol. 2015 Sep;17(9):1134-44.

Nat Cell Biol. 2014 Dec;16(12):1249-56.

Nat Cell Biol. 2012 Feb 5;14(3):295-303.

Cancer Discov. 2012 May;2(5):425-33.

Cell Metab. 2012 Mar 7;15(3):382-94.

Sci Transl Med. 2013 Jul 31;5(196):196ra99.

Trends Pharmacol Sci. 2014 Apr;35(4):187-207.

J Allergy Clin Immunol. 2016 Feb 13. pii: S0091-6749(16)00085-3.

Hepatology. 2016 Apr;63(4):1272-86.

...

## **Customize Library**

- √ Specific Compounds
- √ Quantities
- √ Plate Map
- √ Concentration
- √ Format (Dry/Solid or DMSO Solution)

# **Anti-Infection Compound Library**

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solid)	
Anti-Infection Compound Library	HY-L002	378	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

Cat. No.: HY-L002

- · A unique collection of 378 bioactive Anti-infection compounds for high throughput screening (HTS) and high content screening (HCS).
- Targets include Antibacterial, Antifungal, CMV, HIV, SARS-CoV, Influenza Virus, and more.
- · Bioactivity and safety confirmed by preclinical research and clinical trials, some have been approved by the FDA.
- · A useful toolkit for infectious disease research, available for academic institutions, medical research organizations, and the pharmaceutical industry.
- · Structurally diverse, medicinally active, and cell permeable.
- Detailed compound information with structure, IC<sub>50</sub>, and brief introduction.
- · Validated NMR and HPLC to ensure high purity and quality.

#### Targets Included in Anti-Infection Compound Library: Antibacterial Antifungal Antiparasitic $\mathsf{CMV}$ Filovirus HBV HCV HIV HSV Influenza Virus NNRTIs NRTIs RSV SARS-CoV ... Rhinovirus (HRV)

#### Publications Citing Use of MCE Anti-Infection Library Compounds:

Nat Med. 2014 Aug;20(8):927-35.

Gastroenterology. 2015 Feb;148(2):392-402.e13.

ACS Nano. 2014 Jun 24;8(6):5468-77.

PLoS Pathog. 2015 Mar 30;11(3):e1004758.

Nanomedicine. 2016 Aug 22. pii: S1549-9634(16)30130-7. Br J Pharmacol. 2015 Jun 23. doi: 10.1111/bph.13233.

Br J Pharmacol. 2014 Jan;171(1):237-52.

**Sci Rep.** 2015 Oct 29;5:15806. **Sci Rep.** 2014 Jun 24;4:5411.

ACS Chem Biol. 2015 Aug 21;10(8):1887-96.

...

## **Customize Library**

- √ Specific Compounds
- √ Quantities
- ✓ Plate Map
- √ Concentration
- √ Format (Dry/Solid or DMSO Solution)

Cat. No.: HY-L023

# **Antibody-Drug Conjugate-Related Compound Library**

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/So	olid)
Antibody-Drug Conjugate-Related Compound Library	HY-L023	14	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

- · A unique collection of 14 compounds for antibody-drug conjugates and targeted therapy research.
- Bioactivity and safety confirmed by preclinical research and clinical trials.
- Structurally diverse, medicinally active, and cell permeable.
- Detailed compound information with structure, IC50, and brief introduction.
- Validated NMR and HPLC to ensure high purity and quality.

#### Targets Included in Antibody-Drug Conjugate-Related Compound Library:

ADCs Cytotoxin ADCs Linker Antibody-drug Conjugates

Publications Citing Use of MCE Antibody-Drug Conjugate-Related Library Compounds:

Nat Med. 2016 May;22(5):547-56.

Int J Biol Sci. 2015 Aug 8;11(10):1181-9.

J Transl Med. 2016 Mar 15;14(1):73.

...

# **Customize Library**

- √ Specific Compounds
- **√** Quantities
- √ Plate Map
- √ Concentration
- √ Format (Dry/Solid or DMSO Solution)

# **Anti-Virus Compound Library**

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solid)	
Anti-Virus Compound Library	HY-L027	85	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

Cat. No.: HY-L027

- A unique collection of 85 bioactive anti-virus compounds for high throughput screening (HTS) and high content screening (HCS).
- Targets include HBV, HCV, HIV, HSV, Influenza Virus, NNRTIs, and more.
- · Bioactivity and safety confirmed by preclinical research and clinical trials, some have been approved by the FDA.
- Structurally diverse, medicinally active, and cell permeable.
- Detailed compound information with structure, IC<sub>50</sub>, and brief introduction.
- · Validated NMR and HPLC to ensure high purity and quality.

Targets Included in Anti-Virus Compound Library:						
CMV	HBV	HCV	HCV Protease	HIV	HIV Integrase	
HIV Protease	HSV	Influenza Virus	NNRTIs	Nucleoside antimetabolite	RSV	

## Publications Citing Use of MCE Anti-Virus Library Compounds:

Nat Med. 2014 Aug;20(8):927-35.

Gastroenterology. 2015 Feb;148(2):392-402.e13.

**Nat Commun.** 2014 Oct 30;5:5352. **Nat Protoc.** 2015 May;10(5):807-21.

PLoS Pathog. 2015 Mar 30;11(3):e1004758. Mol Neurobiol. 2014 Apr;49(2):1087-101.

Br J Pharmacol. 2015 Jun 23. doi: 10.1111/bph.13233.

Br J Pharmacol. 2014 Jan;171(1):237-52.

...

# **Customize Library**

- √ Specific Compounds
- **√** Quantities
- √ Plate Map
- √ Concentration
- √ Format (Dry/Solid or DMSO Solution)

# **Apoptosis Compound Library**

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solid)	
Apoptosis Compound Library	HY-L003	62	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

Cat. No.: HY-L003

- A unique collection of 62 small molecules used for survival, proliferation and apoptosis research and anticancer research.
- Targets such as Apoptosis Inducer, Bcl-2 Family, Caspase, DAPK, IAP, MDM2/p53, PKD, Survivin.
- Bioactivity and safety confirmed by preclinical research and clinical trials.
- Some compounds have been approved by the FDA.
- Structurally diverse, medicinally active, and cell permeable.
- Detailed compound information with structure, IC50, and brief introduction.
- · Validated NMR and HPLC to ensure high purity and quality.

Targets Included in Apoptosis Compound Library:					
Apoptosis Inducer	Bcl-2 Family	c-Myc	Caspase	DAPK	
IAP	MDM-2, p53	PKD	Survivin	Thymidylate Synthase	
TNF-alpha					

## Publications Citing Use of MCE Apoptosis Library Compounds:

Nat Protoc. 2015 May;10(5):807-21.

Clin Cancer Res. 2016 Mar 1;22(5):1185-96. Cancer Lett. 2016 Aug 28;379(1):134-142. Mol Neurobiol. 2014 Apr;49(2):1087-101.

...

# **Customize Library**

- √ Specific Compounds
- √ Quantities
- √ Plate Map
- √ Concentration
- √ Format (Dry/Solid or DMSO Solution)

# Cell Cycle/DNA Damage Compound Library

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solid	3)
Cell Cycle/DNA Damage Compound Library	HY-L004	356	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

Cat. No.: HY-L004

- A unique collection of 356 Cell Cycle/DNA Damage related compounds for high throughput screening (HTS) and high content screening (HCS).
- · Targets include Antifolate, APC, ATR/ATM, Aurora Kinase, CDK, Deubiquitinase, HDAC, HMTase, ROCK, Topoisomerase, and more.
- Bioactivity and safety confirmed by preclinical research and clinical trials.
- Some compounds have been approved by the FDA.
- Structurally diverse, medicinally active, and cell permeable.
- Detailed compound information with structure, IC50, and brief introduction.
- · Validated NMR and HPLC to ensure high purity and quality.

Targets Included in Cell Cycle/DNA Damage Compound Library:					
Antifolate	APC	ATM/ATR	Aurora Kinase	Casein Kinase	
CDK	Checkpoint Kinase (Chk)	CRM1	Deubiquitinase	DNA alkylator/crosslinker	
DNA-PK	E1/E2/E3 Enzyme	G-quadruplex	Haspin Kinase	HDAC	
HSP	Kinesin	KSP	LIM Kinase (LIMK)	Microtubule/Tubulin	
Mps1	Nucleoside antimetabolite	p97	PAK	PARP	
PERK	Polo-like Kinase (PLK)	PPAR	PTEN	RAD51	
ROCK	Sirtuin	Telomerase	Topoisomerase	Wee1	

## Publications Citing Use of MCE Cell Cycle/DNA Damage Library Compounds:

**Science.** 2015 May 15;348(6236):799-803. **Science.** 2014 Oct 10;346(6206):244-7.

Nat Med. 2016 May;22(5):547-56.

Nat Cell Biol. 2015 Sep;17(9):1134-44.

Nat Cell Biol. 2014 Dec;16(12):1249-56.

Nat Cell Biol. 2012 Feb 5;14(3):295-303. Trends Pharmacol Sci. 2014 Apr;35(4):187-207.

EMBO J. 2015 May 12;34(10):1385-98.

J Cell Biol. 2014 Nov 24;207(4):499-516.

Proc Natl Acad Sci U S A. 2016 Mar 29;113(13):E1898-906.

J Pineal Res. 2016 Sep;61(2):208-17.

Curr Biol. 2013 Aug 19;23(16):1514-26.

•••

# **Customize Library**

- √ Specific Compounds
- √ Quantities
- √ Plate Map
- √ Concentration
- √ Format (Dry/Solid or DMSO Solution)

# **CNS-Penetrant Compound Library**

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solid	)
CNS-Penetrant Compound Library	HY-L028	100	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

Cat. No.: HY-L028

- · A unique collection of 100 bioactive compounds for high throughput screening (HTS) and high content screening (HCS).
- Bioactivity and safety confirmed by preclinical research and clinical trials.
- · Some inhibitors have been approved by the FDA.
- Targets such as Kinases, GPCR and Ion Channels, and more.
- Structurally diverse, medicinally active, CNS-penetrant and cell permeable.
- More detailed compound information with structure, IC50, and brief introduction.
- · NMR and HPLC validated to ensure high purity and quality.
- · All compounds are in stock.

Targets Included in CNS-Penetrant Compound Library:						
5-HT Receptor	AChE	ADCs cytotoxin	Adenosine Receptor	Adrenergic Receptor		
Amyloid-β	Antibacterial	Antifolate	Antifungal	Antiparasitic		
Bcr-Abl	Calcium Channel	Carbonic Anhydrase	CDK	c-Kit		
COMT	COX	DNA alkylator/crosslinker	DNA/RNA Synthesis	Dopamine Receptor		
EGFR	Estrogen Receptor/ERR	GABA Receptor	Histamine Receptor	HIV		
HIV Protease	HMG-CoA Reductase	HSV	Influenza Virus	Melatonin Receptor		
mGluR	mTOR	nAChR	Neurokinin Receptor	NMDA Receptor		
NRTIs	Nucleoside antimetabolite	p38 MAPK	PDE	PDGFR		
PGE synthase	Raf	Sodium Channel	Src	VEGFR		

#### Publications Citing Use of MCE CNS-Penetrant Library Compounds:

Nat Med. 2016 Jul;22(7):723-6.

Sci Transl Med. 2013 Jul 31;5(196):196ra99.

ACS Nano. 2014 Jun 24;8(6):5468-77. Mol Syst Biol. 2015 Mar 26;11(3):797. Leukemia. 2012 Oct;26(10):2233-44. J Pineal Res. 2016 Sep;61(2):208-17.

**Biomaterials.** 2014 Aug;35(24):6585-94.

Oncogene. 2016 Jun 9;35(23):2961-70.

Sci Rep. 2015 Nov 2;5:16024.

•••

# **Customize Library**

- √ Specific Compounds
- √ Quantities
- √ Plate Map
- √ Concentration
- √ Format (Dry/Solid or DMSO Solution)

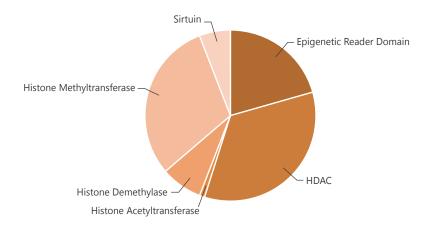
# **Histone Modification Research Compound Library**

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solid	)
Histone Modification Research Compound Library	HY-L024	104	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

Cat. No.: HY-L024

- · A unique collection of 104 bioactive compounds for high throughput screening (HTS) and high content screening (HCS).
- Targets include DNMT, EZH2, HDAC, Histone Demethylase, HMTase and HATs.
- Bioactivity and safety confirmed by preclinical research and clinical trials.
- · Some inhibitors have been approved by the FDA.
- Structurally diverse, medicinally active, and cell permeable.
- Detailed compound information with structure, IC50, and brief introduction.
- · Validated NMR and HPLC to ensure high purity and quality.

#### Histone Modification Research Compound Library Composition



## Publications Citing Use of MCE Histone Modification Research Library Compounds:

Mol Cancer Ther. 2016 Jun;15(6):1217-26. ACS Chem Biol. 2016 May 20;11(5):1245-54. Chem Biol. 2015 Aug 20;22(8):1144-55. Mol Cancer Res. 2014 May;12(5):681-93.

...

## **Customize Library**

#### You can select:

- √ Specific Compounds
- √ Quantities
- √ Plate Map
- √ Concentration
- √ Format (Dry/Solid or DMSO Solution)

L4 Tel: 609-228-6898

Fax: 609-228-5909

Email: sales@MedChemExpress.com

Cat. No.: HY-L007

# **Immunology/Inflammation Compound Library**

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solic	l)
Immunology/Inflammation Compound Library	HY-L007	117	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

- A unique collection of **117** small molecule inhibitors with biological activity used for **Immunology/Inflammation research**. All of the small molecule inhibitors in the Immunology/Inflammation screening library have well characterized biological and pharmaceutical activity.
- A useful tool for researching the **mechanisms** behind Immunology/Inflammation, **drug screening** and other **pharmaceutical** and **biological** applications.
- The stem cell inhibitor library contains targets such as CCR, COX, CXCR, FLAP, Interleukin Related, IRAK, MyD88, PDE, PGE synthase, SIKs and TLR.
- Structurally diverse, medicinally active, and cell permeable.
- Rich documentation with structure, IC50, and brief introduction.
- · Validated NMR and HPLC to ensure high purity.

Targets Included in Immunology/Inflammation Compound Library:					
Caspase 1	CCR	Complement System	COX	CRTH2 (GPR44)	
CXCR	FLAP	Histamine Receptor	IFNAR	Interleukin Related	
IRAK	MyD88	NOD-like Receptors (NLRs)	PDE4	PGE Synthase	
Salt-inducible Kinases (SIKs)	STING	Toll-like Receptor (TLR)			

## Publications Citing Use of MCE Immunology/Inflammation Library Compounds:

J Allergy Clin Immunol. 2016 Jul;138(1):114-122.e4.

**Nat Commun.** 2016 May 25;7:11724.

**EMBO Mol Med.** 2015 Mar 14;7(5):547-61. **Hypertension.** 2012 Nov;60(5):1207-12.

J Neurosci. 2015 Jan 7;35(1):4-20.

Brain Behav Immun. 2016 Aug; 56:175-86.

## **Customize Library**

- √ Specific Compounds
- √ Quantities
- √ Plate Map
- √ Concentration
- √ Format (Dry/Solid or DMSO Solution)

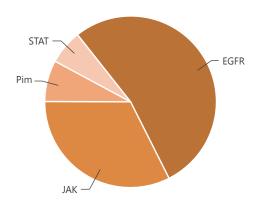
# JAK/STAT Compound Library

Cat. No	.: H	Y-I	1008
---------	------	-----	------

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solid	d)
JAK/STAT Compound Library	HY-L008	78	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

- · A unique collection of 78 bioactive compounds for high throughput screening (HTS) and high content screening (HCS).
- Targets include EGFR, JAK, Pim and STAT.
- Bioactivity and safety confirmed by preclinical research and clinical trials.
- · Some inhibitors have been approved by the FDA.
- Structurally diverse, medicinally active, and cell permeable.
- Detailed compound information with structure, IC50, and brief introduction.
- Validated NMR and HPLC to ensure high purity and quality.

#### JAK/STAT Compound Library Composition



#### Publications Citing Use of MCE JAK/STAT Library Compounds:

Nat Med. 2016 Jul;22(7):723-6.

Leukemia. 2012 Oct;26(10):2233-44.

Elife. 2015 Feb 10;4:e05178.

Oncogene. 2016 Apr 18. doi: 10.1038/onc.2016.127.

Oncogene. 2016 Jun 9;35(23):2961-70.

PLoS Genet. 2015 Mar 27;11(3):e1005120.

Neuro Oncol. 2016 Jul 10. pii: now139.

J Cell Sci. 2015 Sep 1;128(17):3317-29.

ACS Chem Biol. 2016 May 20;11(5):1245-54.

ACS Chem Biol. 2016 Apr 15;11(4):992-1000.

...

# **Customize Library**

# You can select:

- √ Specific Compounds
- √ Quantities
- √ Plate Map
- √ Concentration
- √ Format (Dry/Solid or DMSO Solution)

16

Tel: 609-228-6898

Fax: 609-228-5909

Email: sales@MedChemExpress.com

# MAPK Compound Library

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solid	)
MAPK Compound Library	HY-L010	77	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

Cat. No.: HY-L010

- · A unique collection of 77 small molecule inhibitors for high throughput screening (HTS) and high content screening (HCS).
- Targets include ERK, JNK, MEK, p38 MAPK, Raf, RSK and MNK.
- Bioactivity and safety confirmed by preclinical research and clinical trials.
- · Some inhibitors have been approved by the FDA.
- Structurally diverse, medicinally active, and cell permeable.
- Detailed compound information with structure, IC50, and brief introduction.
- Validated NMR and HPLC to ensure high purity and quality.

Targets Included in MAPK Compound Library:					
ERK	JNK	KLF	MAPKAPK2 (MK2)	MEK	
Mixed Lineage Kinase	MNK	p38 MAPK	Raf	Ribosomal S6 Kinase (RSK)	

## Publications Citing Use of MCE MAPK Library Compounds:

Mol Syst Biol. 2015 Mar 26;11(3):797.

Elife. 2016 Apr 11;5. pii: e14087.

Clin Cancer Res. 2014 Dec 1;20(23):6034-44. Clin Cancer Res. 2014 Nov 1;20(21):5483-95. Clin Cancer Res. 2013 Feb 1;19(3):598-609. Oncogene. 2016 Jun 9;35(23):2961-70. Oncotarget. 2016 Apr 26;7(17):23300-11. Oncotarget. 2016 May 10;7(19):27021-32. Sci Signal. 2015 Aug 25;8(391):ra86.

**Sci Signal.** 2014 Oct 28;7(349):ra102.

...

# **Customize Library**

- √ Specific Compounds
- √ Quantities
- √ Plate Map
- √ Concentration
- √ Format (Dry/Solid or DMSO Solution)

# Membrane Transporter/Ion Channel Compound Library

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/So	olid)
Membrane Transporter/Ion Channel Compound Library	HY-L011	236	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

- · A unique collection of 236 small molecule modulators used for Ion channel and Membrane Transporter research.
- Targets ion channels such as Calcium Channel, Potassium Channel, Sodium Channel, GABA Receptor, Na<sup>+</sup>/Ca<sup>2+</sup> Exchanger, Na<sup>+</sup>/Cl<sup>-</sup> cotransporter and Na<sup>+</sup>/K<sup>+</sup> ATPase.
- Bioactivity and safety confirmed by preclinical research and clinical trials.
- Structurally diverse, medicinally active, and cell permeable.
- Rich documentation with structure, IC<sub>50</sub>, and summary.
- · Validated NMR and HPLC to ensure high purity.

Targets Included in Membrane Transporter/Ion Channel Compound Library:						
AMPAR	ATP Synthase	Calcium Channel	CFTR	Chloride Channel		
CRAC Channel	EAAT2	GABA Receptor	GlyT1	HCN Channel		
MCT	Monoamine transporter	Na <sup>+</sup> /Ca <sup>2+</sup> Exchanger	Na <sup>+</sup> /Cl <sup>-</sup> Cotransporter	Na <sup>+</sup> /K <sup>+</sup> ATPase		
nAChR	NBC	NKCC	NMDA Receptor	P-glycoprotein		
P2X Receptor	Potassium Channel	Proton Pump	SGLT	Sodium Channel		
TRP Channel	URAT1	VDAC				

## Publications Citing Use of MCE Membrane Transporter/Ion Channel Library Compounds:

Sci Rep. 2016 Jul 20;6:30168.

**Biochem Pharmacol.** 2016 Feb 1;101:27-39. **Drug Metab Dispos.** 2016 Oct;44(10):1543-9.

...

# **Customize Library**

#### You can select:

- √ Specific Compounds
- √ Quantities

Cat. No.: HY-L011

- ✓ Plate Map
- √ Concentration
- √ Format (Dry/Solid or DMSO Solution)

.8 Tel: 609-228-6898

Fax: 609-228-5909

Email: sales@MedChemExpress.com

# Metabolism/Protease Compound Library

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solid	)
Metabolism/Protease Compound Library	HY-L012	223	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

Cat. No.: HY-L012

- · A unique collection of 223 small molecule compounds for high throughput screening (HTS) and high content screening (HCS).
- Targets include 5 alpha Reductase, Cytochrome P450, DPP4, Glucokinase, HCV NS3/4A Protease, HIV Integrase, HMG-CoA reductase, HSP, MMP, and more.
- Bioactivity and safety confirmed by preclinical research and clinical trials.
- · Some inhibitors have been approved by the FDA.
- Structurally diverse, medicinally active, and cell permeable.
- Detailed compound information with structure, IC50, and brief introduction.
- · Validated NMR and HPLC to ensure high purity and quality.

Targets Included in Metabolism/Protease Compound Library:						
15-PGDH	5 alpha Reductase	5-Lipoxygenase	Adenosine Deaminase			
Aldehyde Dehydrogenase (ALDH)	Aldose Reductase	Aminopeptidase	Angiotensin-converting Enzyme (ACE)			
Carboxypeptidase	Cytochrome P450	Cathepsin	DGAT			
Dopamine β-hydroxylase	DPP4	Elastase	Enolase			
FAAH	Factor Xa	Farnesyl Transferase	Fatty Acid Synthase (FAS)			
Glucokinase	HCV Protease	HIF/HIF Prolyl-Hydroxylase	HIV Integrase			
HIV Protease	HMG-CoA Reductase (HMGCR)	HSP	Indoleamine 2,3-Dioxygenase (IDO)			
Isocitrate Dehydrogenase (IDH)	MAGL	MMP	Nampt			
PAI-1	Phosphodiesterase (PDE)	Procollagen C Proteinase	Proteasome			
Pyruvate Dehydrogenase	Renin	Ser/Thr Protease	Stearoyl-CoA Desaturase (SCD)			
Thrombin	Tryptophan Hydroxylase	Xanthine Oxidase				

## Publications Citing Use of MCE Metabolism/Protease Library Compounds:

Nature. 2012 Jan 22;482(7383):116-9. Eur Urol. 2015 Aug;68(2):228-35. Hepatology. 2016 Apr;63(4):1272-86. Mol Cancer Ther. 2016 Sep;15(9):2107-18. Mol Cancer Ther. 2015 Jan;14(1):59-69.

**Sci Rep.** 2015 Aug 3;5:12728.

ACS Chem Biol. 2016 Jan 15;11(1):200-10.

...

# **Customize Library**

- √ Specific Compounds
- **√** Quantities
- √ Plate Map
- √ Concentration
- √ Format (Dry/Solid or DMSO Solution)

# **Natural Product Library**

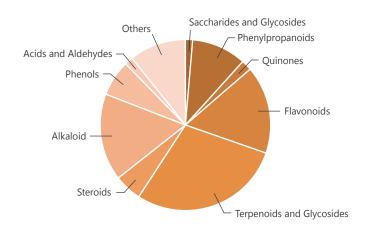
Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solid	))
Natural Product Library	HY-L021	211	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

· A unique collection of 211 natural products for high throughput screening (HTS) and high content screening (HCS).

Cat. No.: HY-L021

- Structurally diverse, bioactive, and cell permeable.
- Bioactivity and safety confirmed by preclinical research and clinical trials.
- Detailed compound information with structure,  $IC_{50}$ , and brief introduction.
- · Validated NMR and HPLC ensure high purity.

## **Natural Product Library Composition**



## Publications Citing Use of MCE Natural Library Products:

Bioresour Technol. 2015 Sep;191:362-8. Algal Research. 2015 Sep;11:284–93.

...

# **Customize Library**

- √ Specific Compounds
- √ Quantities
- √ Plate Map
- $\checkmark$  Concentration
- √ Format (Dry/Solid or DMSO Solution)

# **Neuronal Signaling Compound Library**

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solid	)
Neuronal Signaling Compound Library	HY-L013	304	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

Cat. No.: HY-L013

- · A unique collection of 304 small molecule compounds for high throughput screening (HTS) and high content screening (HCS).
- Targets include 5-HT Receptor, AChE, Adrenergic Receptor, AMPAR, Beta-secretase, Dopamine Receptor, FAAH, Melatonin Receptor, AChR, Opioid Receptor, γ-secretase, and more.
- Bioactivity and safety confirmed by preclinical research and clinical trials.
- · Some inhibitors have been approved by the FDA.
- Structurally diverse, medicinally active, and cell permeable.
- Detailed compound information with structure, IC<sub>50</sub>, and brief introduction.
- Validated NMR and HPLC to ensure high purity and quality.

Targets Included in Neuronal Signaling Compound Library:					
5-HT Receptor	AChE	AMPAR	Amyloid-β	Beta-secretase	
CGRP Receptor	Dopamine Receptor	Dopamine Reuptake Inhibitor	FAAH	GABA Receptor	
Imidazoline Receptor	mAChR	Monoamine Oxidase	nAChR	Neurokinin Receptor	
NMDA Receptor	Opioid Receptor	SSRIs	γ-secretase		

## Publications Citing Use of MCE Neuronal Signaling Library Compounds:

EMBO J. 2012 May 16;31(10):2261-74.

Biol Psychiatry. 2016 Jun 9. pii: S0006-3223(16)32470-2.

J Neurosci. 2015 Feb 11;35(6):2612-23. J Alzheimers Dis. 2012;28(4):809-22.

J Alzheimers Dis. 2010;21(3):1005-12.

Int J Pharm. 2015 Apr 8. pii: S0378-5173(15)00316-6.

...

# **Customize Library**

- √ Specific Compounds
- √ Quantities
- √ Plate Map
- √ Concentration
- √ Format (Dry/Solid or DMSO Solution)

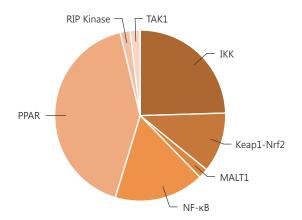
# NF-κB Signaling Compound Library

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solid	d)
NF-кВ Signaling Compound Library	HY-L014	55	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

Cat. No.: HY-L014

- · A unique collection of 55 small molecule compounds for high throughput screening (HTS) and high content screening (HCS).
- Targets include IKK, Keap1-Nrf2, NF-κB, PPAR and TAK1.
- A powerful tool for researching the mechanisms behind cancer, drug screening based on NF-κB signaling pathway and other pharmaceutical and biological applications.
- Bioactivity and safety confirmed by preclinical research and clinical trials.
- · Some inhibitors have been approved by the FDA.
- Structurally diverse, medicinally active, and cell permeable.
- Detailed compound information with structure, IC50, and brief introduction.
- · Validated NMR and HPLC to ensure high purity and quality.

# NF-κB Signaling Compound Library Composition



## ☐ Publications Citing Use of MCE NF-κB Signaling Library Compounds:

Nat Commun. 2015 Jan 21;6:6074.

PLoS Pathog. 2016 Aug 24;12(8):e1005823.

...

## **Customize Library**

- √ Specific Compounds
- **√** Quantities
- ✓ Plate Map
- √ Concentration
- √ Format (Dry/Solid or DMSO Solution)

# PI3K/Akt/mTOR Compound Library

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solid	)
PI3K/Akt/mTOR Compound Library	HY-L015	132	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

Cat. No.: HY-L015

- A unique collection of 132 small molecule inhibitors used for PI3K/Akt/mTOR pathway research.
- Targets include Akt, AMPK, MELK, mTOR, PI3K, PTEN, and more.
- A valuable tool for researching the survival, proliferation, and apoptosis of cells.
- Bioactivity and safety confirmed by preclinical research and clinical trials.
- · Some inhibitors have been approved by the FDA.
- Structurally diverse, medicinally active, and cell permeable.
- Rich documentation with structure, IC<sub>50</sub>, and summary.
- · Validated NMR and HPLC to ensure high purity.

Targets Included in PI3K/Akt/mTOR Compound Library:						
Akt	AMPK	ATM/ATR	DNA-PK	GSK-3	MELK	
mTOR	PDK-1	PI3K	PI4K	PIKfyve	PTEN	

#### Publications Citing Use of MCE PI3K/Akt/mTOR Library Compounds:

Cell. 2014 Feb 13;156(4):771-85.

Nat Med. 2016 May;22(5):547-56.

Cancer Discov. 2012 May;2(5):425-33.

Cell Metab. 2012 Mar 7;15(3):382-94.

Sci Transl Med. 2013 Jul 31;5(196):196ra99.

Leukemia. 2015 Jan;29(1):169-76.

Cancer Res. 2014 Jan 1;74(1):15-23.

Cancer Res. 2013 Apr 15;73(8):2574-86.

Elife. 2016 Apr 11;5.

Clin Cancer Res. 2014 Nov 1;20(21):5483-95.

Oncogene. 2015 Oct 26. doi: 10.1038/onc.2015.406.

...

# **Customize Library**

- √ Specific Compounds
- **√** Quantities
- √ Plate Map
- √ Concentration
- √ Format (Dry/Solid or DMSO Solution)

# **Protein Tyrosine Kinase Compound Library**

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solid	)
Protein Tyrosine Kinase Compound Library	HY-L016	238	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

Cat. No.: HY-L016

- · A unique collection of 238 tyrosine kinase inhibitors for high throughput screening (HTS) and high content screening (HCS).
- · Targets include Ack1, ALK, Btk, c-Fms, c-Met/HGFR, EGFR, FGFR, Insulin Receptor, JAK, PDGFR, and more.
- Bioactivity and safety confirmed by preclinical research and clinical trials.
- · Some tyrosine kinase inhibitors have been approved by the FDA.
- Structurally diverse, medicinally active and cell permeable.
- Rich documentation with structure, IC<sub>50</sub> and summary.
- · Validated NMR and HPLC to ensure the high purity.

Targets Included in Protein Tyrosine Kinase Compound Library:						
Ack1	ALK	AxI	Bcr-Abl	BMX Kinase	Btk	
c-Fms	c-Kit	c-Met/HGFR	DDR1/DDR2 Receptor	DYRK	EGFR	
Ephrin Receptor	FAK	FGFR	FLT3	IGF-1R	Insulin Receptor	
Itk	PDGFR	PKA	Pyk2	Ros1	Src	
Syk	Trk Receptor	VEGFR				

## Publications Citing Use of MCE Protein Tyrosine Kinase Library Compounds:

Nat Med. 2016 Jul;22(7):723-6.

Cancer Cell. 2014 Feb 10;25(2):226-42. Leukemia. 2012 Oct;26(10):2233-44. Ann Rheum Dis. 2016 May;75(5):883-90.

Elife. 2015 Feb 10;4:e05178.

Clin Cancer Res. 2014 Nov 1;20(21):5483-95.
Oncogene. 2016 Jun 9;35(23):2961-70.
Oncogene. 2016 Apr 28;35(17):2247-65.
PLoS Genet. 2015 Mar 27;11(3):e1005120.

Mol Cell Proteomics. 2012 Jun;11(6):M112.017764.

Oncotarget. 2015 Sep 29;6(29):27160-75. Sci Signal. 2014 Oct 28;7(349):ra102.

...

## **Customize Library**

- √ Specific Compounds
- √ Quantities
- √ Plate Map
- √ Concentration
- √ Format (Dry/Solid or DMSO Solution)

# **Stem Cell Signaling Compound Library**

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solic	4)
Stem Cell Signaling Compound Library	HY-L017	115	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

Cat. No.: HY-L017

- · A unique collection of 115 small molecule inhibitors with biological activity used for stem cell regulatory and signaling pathway research.
- Targets include GSK-3, Hedgehog, JAK, ROCK, Wnt, γ-secretase, and more.
- A powerful tool for researching the **mechanisms** behind stem cells, regenerative therapy, **drug screening** based on tumor stem cells, as well as other **pharmaceutical** and **biological applications**.
- · The stem cell inhibitor library contains small molecules associated with signaling pathways which modulate the function of stem cells.
- Structurally diverse, medicinally active, and cell permeable.
- Rich documentation with structure, IC<sub>50</sub>, and customer reviews.
- · Validated NMR and HPLC to ensure high purity.

Targets Included in Stem Cell Signaling Compound Library:						
Casein Kinase	ERK	Gli	GSK-3	Hedgehog	Hippo (MST)	
JAK	Notch	Oct3/4	PKA	Porcupine	ROCK	
sFRP-1	Smo	STAT	TGF-beta/Smad	Wnt	YAP	
β-catenin	γ-secretase					

## Publications Citing Use of MCE Stem Cell Signaling Library Compounds:

Nat Med. 2016 May;22(5):547-56. Cell Signal. 2016 Mar;28(3):148-56. Toxicology. 2016 Apr 29;355-356:31-8.

...

# **Customize Library**

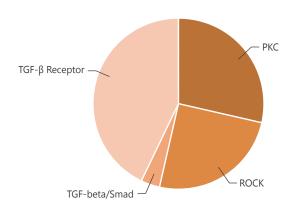
- √ Specific Compounds
- **√** Quantities
- √ Plate Map
- √ Concentration
- √ Format (Dry/Solid or DMSO Solution)

# TGF-beta/Smad Compound Library Cat. No.: HY-L018

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solid	4)
TGF-beta/Smad Compound Library	HY-L018	28	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

- · A unique collection of 28 inhibitors for high throughput screening (HTS) and high content screening (HCS).
- Targets include PKC, ROCK and TGF-β Receptor.
- Bioactivity and safety confirmed by preclinical research and clinical trials.
- Some inhibitors have been approved by the FDA.
- Structurally diverse, medicinally active, and cell permeable.
- Detailed compound information with structure,  $IC_{50}$ , and brief introduction.
- · Validated NMR and HPLC to ensure high purity and quality.

TGF-beta/Smad Compound Library Composition



## Publications Citing Use of MCE TGF-beta/Smad Library Compounds:

Glia. 2014 Feb;62(2):185-98.

Biomed Rep. 2015 May;3(3):361-364.

...

# **Customize Library**

#### You can select:

- √ Specific Compounds
- √ Quantities
- ✓ Plate Map
- √ Concentration
- √ Format (Dry/Solid or DMSO Solution)

26 Tel: 609-228-6898

Fax: 609-228-5909

Email: sales@MedChemExpress.com

# Vitamin D Related Compound Library

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solid)	
Vitamin D Related Compound Library	HY-L019	9	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

Cat. No.: HY-L019

- A unique collection of 9 Vitamin derivatives and Vitamin related compounds for research and drug development.
- Structurally diverse, medicinally active, some cell permeable.
- Detailed compound information with structure and brief introduction.
- Validated NMR and HPLC to ensure high purity and quality.

Publication Citing Use of MCE Vitamin D Related Library Compounds:

Drug Deliv Transl Res. 2015 Aug;5(4):407-23.

# **Customize Library**

- √ Specific Compounds
- **√** Quantities
- √ Plate Map
- √ Concentration
- √ Format (Dry/Solid or DMSO Solution)

# Wnt/Hedgehog/Notch Compound Library

Product Name	Cat. No.	Compounds	Size (Pre-dissolved in DMSO/Solid	1)
Wnt/Hedgehog/Notch Compound Library	HY-L020	40	100 μL/well (10 mM solution)	250 μL/well (10 mM solution)

Cat. No.: HY-L020

- · A unique collection of 40 small molecule inhibitors with biological activity used for Wnt/Hedgehog/Notch pathway research and screening. All of the small molecule inhibitors in Wnt/Hedgehog/Notch library have well characterized biological and pharmaceutical activity.
- Targets include Casein Kinase, Gli, GSK-3, Hedgehog, Porcupine, sFRP-1, Smo, Wnt and β-catenin.
- · Bioactivity and safety confirmed by preclinical research and clinical trials.
- · Some inhibitors have been approved by the FDA.
- Structurally diverse, medicinally active, and cell permeable.
- Detailed compound information with structure, IC50, and brief introduction.
- · Validated NMR and HPLC to ensure high purity and quality.

Targets Included in Wnt/Hedgehog/Notch Compound Library:								
Casein Kinase	Gli	GSK-3	Hedgehog	Notch	PKA			
Porcupine	sFRP-1	Smo	Wnt	β-catenin	γ-secretase			

## Publications Citing Use of MCE Wnt/Hedgehog/Notch Library Compounds:

Nat Med. 2016 May;22(5):547-56. Cell Signal. 2016 Mar;28(3):148-56. Toxicology. 2016 May 20;355-356:31-38.

# **Customize Library**

- √ Specific Compounds
- √ Quantities
- √ Plate Map
- √ Concentration
- √ Format (Dry/Solid or ) DMSO Solution)

# **About Us**



## Overview of MedChemExpress

MedChemExpress (MCE) offers a wide range of high quality research chemicals and biochemicals including novel life-science reagents, reference compounds, APIs and natural compounds for laboratory and scientific use. MCE has knowledgeable and friendly customer service and technical support teams with years of experience in the life science industry. MCE will be a competent and trustworthy partner for your research and scientific projects.



## Quality

Product quality is the key to our success and we take pride in offering only the highest-grade products. Product identity, quality, purity and activity are assured by our robust quality control and assurance polices, programs and procedures. We perform thorough analytical testing - including HNMR, LC-MS and HPLC - stability testing and activity assays on our products and the results from these tests are available to clients.



## Experience

Our chemists are highly experienced in molecular synthesis and the preparation of large quantities of structurally diverse and synthetically challenging molecules. We work with clients that have widely different needs and we have been very successful in meeting such needs.



## Services

We offer:

- Structurally and synthetically diverse biologically active compounds
- Flexible order volume ranging from milligrams to kilograms scale
- · On-time delivery of products

We are a client-centric company and are always looking to hearing from you about how our products and services might better assist you.

www.MedChemExpress.com

**Inhibitors, Agonists, Screening Libraries** 

# MCE USA

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

# MCE Europe

Tel: +4686500910 Fax: +4686531025 E-mail: eu.sales@MedChemExpress.com

Address: Bergkällavägen 37 lokal 24 192 79 Sollentuna Sweden