

Biorelevant Media Preparation v1.2

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General Tips



It's important to use clean glassware for making the media to prevent microbial growth Do not refrigerate or freeze the media





Keep the media out of direct sunlight and preferably in the dark

Store Buffer Concentrate bottles at room temperature and ensure both cap and nozzle are tightly closed after use





Once opened, store the bottle of powder in the refrigerator (2-8 °C) with the cap tightly closed



FaSSIF



Component	Concentration (mM)
Taurocholate	3
Phospholipids	0.75
Sodium	148
Chloride	106
Phosphate	29





How to make 1 L of FaSSIF

For other quantities of FaSSIF and instructions how to prepare your own buffer, scan this QR code or go to <u>biorelevant.com/FFF</u>





Prepare buffer

- Weigh 41.65 g (or 35.00 mL) of FaSSIF Buffer Concentrate into suitable container
- Make up to volume (1.000 L) with purified water at room temperature

Check pH

 If required adjust the pH to 6.5 with Sodium hydroxide 1M or Hydrochloric acid 1M





Add powder

- Weigh 2.240 g of FaSSIF/FeSSIF/FaSSGF powder into suitable container
- Add buffer to volume (1.000L)
- Stir until powder is completely dissolved

- Let stand for 2 hours. It will become slightly opalescent. Your FaSSIF is now ready to use
- We recommend using the medium at room temperature or at 37°C. It can be used for up to 48 hours at these temperatures



FeSSIF



Component	Concentration (mM)
Taurocholate	15
Phospholipids	3.75
Sodium	319
Chloride	203
Acetic acid	144





How to make 1 L of FeSSIF

For other quantities of FeSSIF and instructions how to prepare your own buffer, scan this QR code or go to <u>biorelevant.com/FFF</u>





Prepare buffer

- Weigh 81.41 g (or 70.00 mL) of FeSSIF Buffer Concentrate into suitable container
- Make up to volume (1.000 L) with purified water at room temperature

Check pH

• If required adjust the pH to 5.0 with Sodium hydroxide 1M or Hydrochloric acid 1M



Add powder

- Weigh 11.20 g of FaSSIF/FeSSIF/FaSSGF powder into suitable container
- Add buffer to volume (1.000L)
- Stir until powder is completely dissolved

- FeSSIF will have a clear appearance and is now ready to use
- We recommend using the medium at room temperature or at 37°C. It can be used for up to 48 hours at these temperatures





Component	Concentration (mM)
Taurocholate	0.08
Phospholipids	0.02
Sodium	34
Chloride	59



How to make 1 L of FaSSGF

For other quantities of FaSSGF and instructions how to prepare your own buffer, scan this QR code or go to <u>biorelevant.com/FFF</u>





Prepare buffer

- Weigh 36.78 g (or 35.00 mL) of FaSSGF Buffer Concentrate into suitable container
- Make up to volume (1.000 L) with purified water at room temperature

Check pH

• If required adjust the pH to 1.6 with Hydrochloric acid 1M



Add powder

- Weigh 0.0597 g of FaSSIF/FeSSIF/FaSSGF powder into suitable container
- Add buffer to volume (1.000L)
- Stir until powder is completely dissolved

- FaSSGF will have a clear appearance and is ready to use
- We recommend using the medium at room temperature or at 37°C. It can be used for up to 48 hours at these temperatures



FaSSIF-V2



Component	Concentration (mM)
Taurocholate	3
Phospholipids	0.2
Sodium	106
Chloride	69
Maleic acid	19



FaSSIF-V2



How to make 1 L of FaSSIF-V2

To calculate other quantities of FaSSIF-V2 scan this QR code or visit <u>biorelevant.com/V2FAS</u>





Prepare buffer

In about 0.9 L of purified water dissolve:

- 1.392 g of Sodium hydroxide pellets (NaOH)
- 2.220 g of Maleic acid (C₄H₄O₄)
- 4.010 g of Sodium chloride (NaCl)

Check pH

- Adjust the pH to 6.5 with Sodium hydroxide 1M or Hydrochloric acid 1M
- Make up to volume (1 L) with purified water at room temperature





Add powder

- Weigh 1.790 g of FaSSIF-V2 powder into suitable container
- Add buffer to volume (1.000L)
- Stir until powder is completely dissolved

- Let stand for 1 hour. Your FaSSIF-V2 is now ready to use
- We recommend using the medium at room temperature or at 37°C. It can be used for up to 48 hours at these temperatures



FeSSIF-V2



Bile Salts, Lecithin, Digestive Components

BUFFER Maleate

DATE OF BIRTH

Component	Concentration (mM)
Taurocholate	10
Phospholipids	2
Oleate	0.8
Glycerol monoleate	5
Sodium	218
Chloride	125
Maleic Acid	55



How to make 1 L of FeSSIF-V2

For other quantities of FeSSIF-V2, scan this QR code or go to biorelevant.com/V2FES





Prepare buffer

In about 0.9 L of purified water dissolve:

- 3.270 g of Sodium hydroxide pellets (NaOH)
- 6.390 g of Maleic acid (C₄H₄O₄)
- 7.330 g of Sodium chloride (NaCl)

Check pH

- Adjust the pH to 5.8 with Sodium hydroxide 1M or Hydrochloric acid 1M
- Make up to volume (1 L) with purified water at room temperature





Add powder

- Weigh 9.760 g of FeSSIF-V2 powder into suitable container
- Add buffer to volume (1.000L)
- Stir until powder is completely dissolved

- Let stand for 1 hour. FeSSIF-V2 will have a clear appearance and is now ready to use
- We recommend using the medium at room temperature or 37 °C. It can be used for up to 48 hours at these temperatures



Dog FaSSIF



STATE Fasted

FLUID SIMULATED Small Intestinal (Canine)

CONTAINS Bile Salts, Lecithin, Digestive Components

BUFFER Phosphate

DATE OF BIRT

COMPOSITION

Component	Concentration (mM)
Taurocholate	5
Taurodeoxycholat	e 5
Phospholipids	1.25
Lysophospholipid	s 1.25
Oleate	1.25
Sodium	121
Chloride	60
Phosphate	29



How to make 1 L of Dog FaSSIF

To calculate other quantities of Dog FaSSIF scan this QR code or visit biorelevant.com/DOGFAS





Prepare buffer

In about 0.9 L of purified water dissolve:

- 0.870 g of Sodium hydroxide pellets (NaOH)
- 3.950 g of Monobasic sodium phosphate monohydrate (NaH₂PO₄ · H₂O)
- 3.480 g of Sodium chloride (NaCl)

Check pH

- Adjust the pH to 7.5 with Sodium hydroxide 1M or Hydrochloric acid 1M
- Make up to volume (1 L) with purified water at room temperature





Add powder

- Weigh 7.800 g of Dog FaSSIF/Dog FaSSGF powder into suitable container
- Add buffer to volume (1.000L)
- Stir until powder is completely dissolved

- Let stand for 1 hour. Your Dog FaSSIF is now ready to use
- We recommend using the medium at room temperature or at 37°C. It can be used for up to 48 hours at these temperatures



Dog FaSSGF



Fasted

FLUID SIMULATED Stomach (Canine)

CONTAINS Bile Salts, Lecithin, Digestive Components

BUFFER Maleate

DATE OF BIRT

Component	Concentration (mM)
Taurocholate	0.1
Taurodeoxycholate	0.1
Phospholipids	0.025
Lysophospholipid	s 0.025
Oleate	0.025
Sodium	59
Chloride	15
Maleic	22



How to make 1 L of Dog FaSSGF

For other quantities of Dog FaSSGF and instructions how to prepare the pH 1.5 version, scan this QR code or go to biorelevant.com/DOGFAS





Prepare buffer

In about 0.9 L of purified water dissolve:

- 1.610 g of Sodium hydroxide pellets (NaOH)
- 2.520 g of Maleic acid (C₄H₄O₄)
- 1.100 g of Sodium chloride (NaCl)

Check pH

- Adjust the pH to 6.5 with Sodium hydroxide 1M or Hydrochloric acid 1M
- Make up to volume (1 L) with purified water at room temperature





Add powder

- Weigh 0.160 g of Dog FaSSIF/Dog FaSSGF powder into suitable container
- Add buffer to volume (1.000L)
- Stir until powder is completely dissolved

- Your Dog FaSSGF will have a clear appearance and is ready to use
- We recommend using the medium at room temperature or at 37°C. It can be used for up to 48 hours at these temperatures



FaSSCoF



Tris/Maleate

DATE OF BIRTH



COMPOSITION

Component	Concentration (mM)
Sodium Cholate	0.15
Phospholipids	0.3
Oleate	0.1
Sodium hydroxide	120
TRIS	45
Maleate	76





How to make 1 L of FaSSCoF

To calculate other quantities of FaSSCoF visit this QR code or visit biorelevant.com/COFAS





Prepare buffer

In about 0.9 L of purified water dissolve:

- 4.800 g of Sodium hydroxide pellets (NaOH)
- 8.800 g of Maleic acid (C₄H₄O₄)
- 5.500 g of Tris base (C₄H₁₁MO₃)

Check pH

- Adjust the pH to 7.8 with Sodium hydroxide 1M or Hydrochloric acid 1M
- Make up to volume (1 L) with purified water at room temperature





Add powder

- Weigh 0.340 g of FaSSCoF powder into suitable container
- Add buffer to volume (1.000L)
- Stir until powder is completely dissolved

Ready to use

- Let stand for 1 hour. Your FaSSCoF is now ready to use
- We recommend using the medium at room temperature or at 37°C. It can be used for up to 24 hours at these temperatures

The FaSSCoF powder is very hygroscopic so it's important to replace the bottle cap immediately after use and keep it tightly closed



FeSSCoF



Component	Concentration (mM)
Sodium Cholate	0.6
Phospholipids	0.5
Oleate	0.2
Sodium hydroxide	34
TRIS	31
Maleate	30



How to make 1 L of FeSSCoF

To calculate other quantities of FeSSCoF scan this QR code or visit <u>biorelevant.com/COFES</u>





Prepare buffer

In about 0.9 L of purified water dissolve:

- 0.660 g of Sodium hydroxide pellets (NaOH)
- 3.500 g of Maleic acid (C₄H₄O₄)
- 3.690 g of Tris base (C₄H₁₁MO₃)

Check pH

- Adjust the pH to 6.0 with Sodium hydroxide 1M or Hydrochloric acid 1M
- Make up to volume (1 L) with purified water at room temperature





Add powder

- Weigh 0.740 g of FeSSCoF powder into suitable container
- Add buffer to volume (1.000L)
- Stir until powder is completely dissolved

Ready to use

- Let stand for 1 hour. Your FeSSCoF is now ready to use
- We recommend using the medium at room temperature or at 37°C. It can be used for up to 24 hours at these temperatures

The FeSSCoF powder is very hygroscopic so it's important to replace the bottle cap immediately after use and keep it tightly closed



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