

CEPT Cocktail & Supplemented E8 Medium Preparation

Required Consumables

Item	Vendor	Catalog Number
Chroman 1	MedChem Express	HY-15392
Emricasan	SelleckChem	S7775
Polyamine supplement (1000X)	Sigma-Aldrich	P8483
Trans-ISRIB	R&D Systems	5284
Dimethylsulfoxide (DMSO)	ATCC	4-X
Essential 8 (E8) Medium	Life Technologies	A1516401
Bottle-top vacuum filter system	Corning	431096

CEPT Stock Solutions

0.5 mM (10,000X stock) solution of chroman 1

- Dissolve 5 mg of chroman 1 in 22.91 ml of DMSO. Vortex until completely dissolved.
- Store at 4°C for up to a month or -20°C for up to 1 year.

50 mM (10,000X stock) solution of emricasan

- Dissolve 5 mg of emricasan in 0.1756 mL of DMSO. Vortex until completely dissolved.
- Store at 4°C for up to a month or -20°C for up to 1 year.

7 mM (10,000X stock) solution of trans-ISRIB

- Dissolve 10 mg of trans-ISRIB in 3.165 mL of DMSO. Gently warm at 45-60°C and vortex until completely dissolved.
- Store at 4°C for up to a month or -20°C for up to 1 year.

E8 Medium supplemented with CEPT

- Dilute chroman 1, emricasan, and trans-ISRIB at 1:10,000, and polyamine supplement at 1:1,000 to make final concentrations of chroman 1 (50 nM), emricasan (5 µM), polyamine supplement (1x), and trans-ISRIB (0.7 µM) in E8 Medium.
- Filter the prepared medium using a bottle-top vacuum filter system.
- E8 Medium supplemented with CEPT can be stored at 4°C for up to 1 month.

Reference

Chen Y, Tristan CA, Chen L, et al (2021) A Versatile Polypharmacology Platform Promotes Cytoprotection and Viability of Human Pluripotent and Differentiated Cells. Nat Methods. <https://www.nature.com/articles/s41592-021-01126-2>.