Product Name

Types	Product Name	Cat. No.	Size	Application
Standard	mSRCgel™ Extracellular Matrix Extracted from EHS mouse sarcoma [+] Phenol Red	C2010-0005	5 mL	Cell growth, differentiation, morphological study, cytochemical function, cell invasion Protein concentration: 8 – 13 mg/ mL
		C2010-0010	10 mL	
	mSRCgel™ Extracellular Matrix Extracted from EHS mouse sarcoma [-] Phenol Red	C2011-0005	5 mL	
		C2011-0010	10 mL	
Reduced Growth Factor	mSRCgel™ Extracellular Matrix, Reduced Growth Factor Extracted from EHS mouse sarcoma [+] Phenol Red	C2020-0005	5 mL	Suitable for applications where a more highly defined basement membrane preparation is desired. It has been used to study gene expression in primary mouse mammalian epithelial cells (reducing background signals induced by growth factors). Protein concentration: 8 - 13 mg/ mL
		C2020-0010	10 mL	
	mSRCgel™ Extracellular Matrix, Reduced Growth Factor Extracted from EHS mouse sarcoma [-] Phenol Red	C2021-0005	5 mL	
		C2021-0010	10 mL	
High Protein Concentration	mSRCgel™ Extracellular Matrix, High Protein Concentration Extracted from EHS mouse sarcoma [+] Phenol Red	C2030-0005	5 mL	In vivo angiogenesis studies, 3D tumor models Protein concentration: 16 - 26 mg/mL
		C2030-0010	10 mL	
	mSRCgel™ Extracellular Matrix, High Protein Concentration Extracted from EHS mouse sarcoma [-] Phenol Red	C2031-0005	5 mL	
		C2031-0010	10 mL	
	mSRCgel™ Extracellular Matrix, High Protein Concentration, Reduced Growth Factor Extracted from EHS mouse sarcoma [+] Phenol Red	C2032-0005	5 mL	
		C2032-0010	10 mL	
	mSRCgel™ Extracellular Matrix, High Protein Concentration, Reduced Growth Factor Extracted from EHS mouse sarcoma [-] Phenol Red	C2033-0005	5 mL	
		C2033-0010	10 mL	
Stem Cell	mSRCgel™ iPSC-Qualified Extracellular Matrix Extracted from EHS mouse sarcoma [+] Phenol Red	C2040-0005	5 mL	Stem cell cultures, providing the repeatability and consistency required for trophoblastic cultures of human embryonic stem cells and induced pluripotent stem cell
		C2040-0010	10 mL	
Organoid	mSRCgel™ Organoid-Qualified Extracellular Matrix Extracted from EHS mouse sarcoma [+] Phenol Red	C2050-0005	5 mL	Organoid research, miniorgans of the kidney, thyroid, liver, brain, lung, breast organs *etc.* Protein concentration: 8 – 13 mg/ mL

Product Description

The extracellular matrix (ECM) can provide structural support for cells and tissues in a dynamic 3-dimensional network of macromolecules. The ECM is a molecular network which holds bioactive molecules and growth factors together. It is of vital importance that it controls the basal behaviors and characteristics of cells such as adhesion, migration, polarity, differentiation, proliferation, and apoptosis.

mSRCgel™ is a natural basement membrane (BM) extracted from **m**ouse **s**ar**c**oma cells, a type of connective tissue tumor. mSRCgel™ is high in ECM proteins, including laminin, collagen IV, heparan sulfate proteoglycan (perlecan), entactin, and many essential growth factors.

Preparation and Storage

Storage: Store at **-20°C**. Avoid multiple freeze-thaws. Avoid exposure to light.

Shelf Life: Stable until expiry date on label.

Procedure

During the thawing process, store the mSRCgel™ Extracellular Matrix at 2 - 8°C overnight. Thawed mSRCgel™ solidifies quickly above 15°C; when ready to use mSRCgel™, keep it on ice to prevent untimely gelling.

Different thicknesses and concentrations are suited to different applications of mSRCgel™. A thick gel is needed for applications such as endothelial cell formation of capillary-like structures, epithelial organoid formation, or tumor organoid formation. Some applications require a thin layer coating but not a thick gel, such as propagation of primary cells.

Thick Gel Method:

1. Thaw mSRCgel™ as described above.
2. Slowly pipet up and down to mix the mSRCgel™ solution well, do not introduce air bubbles.
3. Pipette 200 - 300 µL mSRCgel™ solution per cm^2 of the growth surface.
4. Place the coated plate at 37°C for 30 minutes.
5. Coated plates are ready for use.

Thin Layer Method (non-gelling):

1. Thaw mSRCgel™ as described above.
2. Slowly pipet up and down to mix the mSRCgel™ solution, do not introduce air bubbles.
3. Dilute mSRCgel™ to a desired concentration in a cold serum-free medium. A 1:100 dilution is suitable for propagating primary cells. An appropriate concentration should be tested out according to the application.
4. Cover the growth surface area with enough solution. Generally, a volume of 300 µL per cm^2 is suitable.
5. Incubate the coated plate at room temperature for one hour.
6. Aspirate the coating solution and plate cells at once. Prevent the coated surface from drying out.

Quality Control

mSRCgel™ Extracellular Matrix is tested for the presence of bacteria, fungi, and mycoplasma. In addition, osmolality, protein concentration, endotoxin, gel stability, and biological activity are tested.

Issue Date

June 2023

Precaution and Disclaimer

For research use only, not for clinical diagnosis, and treatment.