

# GFR Basement Membrane Matrix (Phenol Red-Free)

## Introduction

This product is a basement membrane extracted from tumors of EHS mice, rich in extracellular matrix proteins. Its main components are laminin, collagen IV and nestin. Basement membrane extracted from mouse tumors also contain some growth factors, such as TGF- $\beta$ , EGF, IGF.

This product effectively reduces the level of a variety of growth factor, suitable for experiments with high requirements, such as organoid culture, in vitro angiogenesis. It can also be used for experiments such as cell migration or invasion and 3D spheroid culture.

This product is a sterile solution and does not contain phenol red. And this product has a concentration of approximately 8 mg/mL.

### **Components and Storage**

Size		5 ml	10 ml	Storago
Components		5 ML	TOTIL	Storage
GFR Basement Membrane Matrix (Phenol Re	ed-Free)	5 mL	10 mL	-80°C
Shipping: Dry ice	Shelf life	: 2 years		

# Protocol

- 1. Prepare before use
  - When first use, immerse the vial in ice and then place it in a 4°C freezer overnight to thaw. After thawing, swirl vial to ensure that the contents are well mixed. Aliquot this product to avoid repeated freeze-thaw cycles.

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- 2) This product is temperature sensitive, keep it on ice all the time. As soon as the temperature rises, this product may partially solidify.
- 3) It is suggested that pre-cool all used consumables in advance.
- 2. Thin gel method
  - 1) Thaw this product and mix well by slowly pipetting up and down.
  - Add 50 µL of GFR Basement Membrane Matrix per cm<sup>2</sup> onto the growth surface. Be careful not to create bubbles.

- 3) Place the plate in a 37°C incubator for 30 minutes. The plate is ready to use.
- 3. Thick gel method
  - 1) Thaw this product and mix well by slowly pipetting up and down.
  - Add 150-200 µL of GFR Basement Membrane Matrix per cm<sup>2</sup> onto the growth surface. Be careful not to create bubbles.
  - 3) Place the plate in a 37°C incubator for 30 minutes. The plate is ready to use.
- 4. Thin coating method
  - Thaw this product and mix well by slowly pipetting up and down. Dilute GFR Basement Membrane Matrix to desired concentration using serum-free medium.
  - Add diluted GFR Basement Membrane Matrix to cover the entire growth surface. Matrix coating is recommended at 0.01-0.02 mg/cm<sup>2</sup>. Be careful not to create bubbles.
  - 3) Put the plate in the 37°C incubator for 1 h. The coated plate is ready to use.
- 5. 3D culture method
  - 1) Thaw this product and mix well by slowly pipetting up and down.
  - Resuspend cells with GFR Basement Membrane Matrix, the recommended Matrix concentration > 70%. Be careful not to create bubbles.
  - Carefully drop the Matrigel/cell mixture to the center of each well, with a recommended amount of 15-20 
    µL/cm<sup>2</sup>.
  - 4) Place the plate in a 37°C incubator for 15-30 minutes and wait for the matrix to solidify.
  - 5) Add appropriate growth media according to the needs of the experiment.

#### Note

- 1. This product should not be stored in a frost-free refrigerator to avoid repeated freeze-thaw cycles.
- 2. For your safety and health, please wear lab coats and gloves during the experiment.
- 3. For research use only. Not to be used in clinical diagnostic or clinical trials.

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