ProductInformation

Attachment and Matrix Factors

Product Number	Description	Source	Storage	Target Cells For Attachment	Concentration For Use	Refs.
S 5174	SPARC (secreted protein acidic and rich in cysteine)	mouse parietal yolk sac (PYS-2) cells	-20ºC	Expressed in a variety of tissues, it inhibits cell spreading and diminishes focal contacts in vitro	4-40 µg/ml	52,53
S 5171	SUPERFIBRONECTIN Approx. 300 Bloom	human plasma and recombinant	2-8ºC	epithelial cells, mesenchymal cells, neuronal cells, fibroblasts, neural crest cells, endothelial cells	1 µg/ml	54,55, 56,57, 58
T 9427	TENASCIN Lyophilized	human glioblastoma cells	-20ºC	epithelial cells, mesenchymal cells, neuronal cells, neural crest cells	10 µg/cm^2	59,60, 61
T 7043	THROMBOSPONDIN Lyophilized	human platelets	-20ºC	Attachment of osteoblasts, bovine aortic endothelial cells, neurons, human melanoma cells; enhances proliferation of mitogen-stimulated smooth muscle cells and fibroblasts	25 ng-50 µg/ml	36,37, 38,39, 40,41, 42,43, 44,45, 46
V 8379 V 0132 V 9881	VITRONECTIN	human plasma rat plasma bovine plasma	2-8ºC; store solubilized product at 2-8ºC	Cells with integrin receptors that bind vitronectin: platelets, endothelial cells, melanoma cells, osteosarcoma	0.1 µg/cm^2	26,27, 28,29, 30,31, 32

This table is extracted from the Tissue Culture Technical Information Section of the Sigma Catalog. Please refer to the catalog for the complete table of extracellular matrices/attachment factors and references.

PRODUCT USE:

■ **THROMBOSPONDIN (Product No. T 7043)**

Optimal conditions must be determined for each cell line and application.

1) Reconstitute with 0.5 ml of tissue culture grade water and sterilize by filtration.
2) The resulting solution is slightly hazy and has a concentration of 40 µg/ml.
3) Use concentration for thrombospondin in culture has been reported in the range of 25 ng to 50 µg/ml depending upon the application.
4) Please refer to the literature for more specific information.

■ **VITRONECTIN (Product Nos. V 8379, V 0132, V 9881)**

Optimal conditions must be determined for each cell line and application.

1) Reconstitute with tissue culture grade water and sterilize by filtration.
2) Material is reported to be active at a concentration of 0.1 mg/cm^2 of surface area. Optimal concentrations vary with each cell line.
3) Coat culture surface for 1-2 hours at 37°C. Remove any remaining solution and wash with a balanced salt solution before introducing cells and medium.

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