

Recombinant Human ESM1/Endocan Protein (His Tag)

Catalog No. PKSH031079

Note: Centrifuge before opening to ensure complete recovery of vial contents.

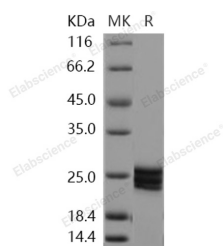
Description

Synonyms	endocan
Species	Human
Expression Host	Baculovirus-Insect Cells
Sequence	Met 1-Arg184
Accession	NP_008967.1
Calculated Molecular Weight	19.6 kDa
Observed molecular weight	23-27 kDa
Tag	C-His
Bioactivity	Measured by the ability of the immobilized protein to support the adhesion of Jurkat human acute T cell leukemia cells. When 8×10^4 cells/well are added to ESM1-His coated plates (10 µg/mL, 100 µL/well), approximately 48% will adhere after 30 minutes at 37°C.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 20mM Tris, 500mM NaCl, 10% glycerol, pH 8.0 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

For Research Use Only

Background

ESM1 is a secreted protein which is produced by adipocytes. It has been noticed that ESM1 may play some role in obesity-associated vascular disease since circulating ESM-1 levels are reduced in the overweight and obese. ESM1 is mainly expressed in the endothelial cells in human lung and kidney tissues. The expression of ESM1 gene is regulated by cytokines, suggesting that it may play a role in endothelium-dependent pathological disorders. Recently, ESM1 has been described as a specific biomarker of tip cells during neoangiogenesis. Its expression has been shown to be increase in presence of pro-angiogenic growth factors such as VEGF or FGF-2. In hypervascularized cancers, overexpression of endocan has been detected by immunohistochemistry using monoclonal antibodies against ESM1.