Recombinant Mouse ESM1/Endocan Protein (Baculovirus, His Tag)

Catalog No. PKSM040353

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

Description	
Synonyms	Endothelial cell-specific molecule 1;ESM-1;Esm1;Endocan
Species	Mouse
Expression Host	Baculovirus-Insect Cells
Sequence	Met1-Arg184
Accession	Q9QYY7
Calculated Molecular Weight	19.1 kDa
Observed molecular weight	23 kDa
Tag	C-His
Bioactivity	Not validated for activity
Properties	
Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μ g 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, pH 8.0, 10% glycerol 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	

KDa	М
116	
66.2	-
45.0	-
35.0	-
25.0	
18.4	-
14.4	-

> 95 % as determined by reducing SDS-PAGE.

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

For Research Use Only

Toll-free: 1-888-852-8623 Web: <u>www.elabscience.com</u> Tel: 1-832-243-6086 Email: <u>techsupport@elabscience.com</u>

Elabscience®

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.

For Research Use Only