Elabscience®

Recombinant Mouse ESM1 Protein(Fc Tag)

Catalog Number: PDMM100102

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

Description			
Species	Mouse		
Source	Mammalian-derived Mouse ESM1 proteins Ala22-Arg184, with an C-terminal Fc		
Calculated MW	40.8 kDa		
Observed MW	45 kDa		
Accession	Q9QYY7		
Bio-activity	Not validated for activity		
Properties			
Purity	> 90% as determined by reducing SDS-PAGE.		
Endotoxin	< 1.0 EU/mg 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 $< -20^{\circ}$ C for 3 months.		
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.		
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with 5% Trehalose and 5%		
	Mannitol.		
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of		
	0.5 mg/mL. Concentration is measured by UV-Vis.		

Data

kDa	м	R
80		
60	-	
40	-	
30	-	
20	-	
12		

SDS-PAGE analysis of Mouse ESM1 proteins, 2 µg/lane of Recombinant Mouse ESM1 proteins was resolved with an SDS-PAGE under reducing conditions, showing bands at 40.8KD

Background

Elabscience®

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.