

Recombinant Human MASP1 protein (His Tag)

Catalog Number: PDEH100826

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

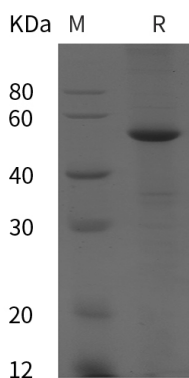
Description

Species	Human
Source	E.coli-derived Human MASP1 protein His20-Ala447, with an N-terminal His
Calculated MW	47.0 kDa
Observed MW	48 kDa
Accession	P48740
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 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°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm 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



> 95 % as determined by reducing SDS-PAGE.

Background

Mannan-Binding Lectin Serine Protease 1 (MASP-1) belongs to the peptidase S1 family. MASP1 contains two CUB domains, one EGF-like domain, one peptidase S1 domain and two Sushi (CCP/SCR) domains. MASP1 is primarily expressed in liver. MASP1 involved in the lectin pathway of the complement, performs a key role in innate immunity by recognizing pathogens through patterns of sugar moieties and neutralizing them. MASP1 is synthesized as a zymogen and activated when it complexes with the pathogen recognition molecules of lectin pathway, the mannose-binding lectin and the ficolins. MASP1 is not directly involved in complement activation but may act as an amplifier of complement activation by cleaving complement C2 or by activating another complement serine protease, MASP2. MASP1 is also able to cleave fibrinogen and factor XIII and may be involved in coagulation. MASP1 is inhibited by SERPING1 and A2M.

For Research Use Only