



Recombinant Protein Technical Manual

Recombinant Human MASP1 Protein (His Tag)

RPES4231

Product Data:

Product SKU: RPES4231

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P48740

Protein Information:

Molecular Mass: 80.7 kDa

AP Molecular Mass: 120 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

Formulation: Supplied as a 0.2 µm filtered solution of 20mM Tris, 200mM NaCl, 10% Glycerol, pH 8.0.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Mannan-Binding Lectin Serine Protease 1; Complement Factor MASP-3; Mannose-Binding Lectin-Associated Serine Protease 1; MASP; RaRF; Serine Protease 5; MASP1; CRARF; CRARF1; PRSS5

Immunogen Information:

Sequence: His20-Arg728

Background:

Mannan-Binding Lectin Serine Protease 1 (MASP) 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 mannan-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.