

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Complement Factor MASP3 Catalytic Domain in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Complement Factor MASP3 Catalytic Domain Ile450-Val721 Accession # NP_624302
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human Complement MASP3 Catalytic Domain (Catalog # 1724-SE)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

MASP3 is a member of the MASPs involved in mannan-binding lectin (MBL) complement pathway (1). The MBL pathway is initiated by the binding of MBL to specific carbohydrate structures found on the surface of a variety of microorganisms. Activation of the complement pathway via MBL is initiated by specific MASPs. Three MASPs have been identified and all have domain structures similar to those of C1r and C1s with a heavy chain (chain A) and a light chain (chain B). Chain A is composed of CUB1, EGF, CUB2, CCP1 and CCP2 while chain B corresponds to the catalytic domain found in many serine proteases. MASP1 and MASP3 are two alternatively spliced products of a single gene, which contain the same A chains but entirely different B chains. Distinct MASPs found in different MBL oligomers may have different biological activities. For example, MASP3, found together with MASP2, downregulates the C4 and C2 cleaving activity of MASP2. The protease activity of MASP3 is first revealed here using rhMASP3CD (2), which is inhibited by serine protease inhibitors such as Ecotin and AEBSF (R&D Systems, Catalog # 1328-PI and EI001).

References:

1. Dahl, M.R. *et al.* (2001) Immunity **15**:127.
2. Cortesio, C.L. and W. Jiang (2006) Arch. Biochem. Biophys. **449**:164.