

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Mast Cell Protease-1/Mcpt1 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant mouse (rm) MCP-6, -7, or -11 is observed.
Source	Monoclonal Rat IgG _{2B} Clone # 285008
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Mast Cell Protease-1/Mcpt1 Ile21-Lys246 Accession # P11034
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Mast cell protease-1 (MCPT-1), also known as β -chymase, is a member of the Chymase family of chymotrypsin-like serine proteases (1). mMCPT-1 is a mast cell protease predominantly expressed in intestinal mucosal mast cells where it promotes mucosal permeability in intestinal allergic hypersensitivity reactions (2). Its activation is completed by the removal of a two residue N-terminal propeptide by a dipeptidyl peptidase (Cathepsin C) (3). Like human α -Chymase, MCPT-1 is capable of the conversion of angiotensin I to angiotensin II, which plays a key role in the regulation of arterial pressure (4). Studies have shown that specific chymase inhibitors are able to diminish the development of abdominal aortic aneurysm and reduce the adhesion formation after cardiac surgery in hamsters (5, 6). Therefore, the development of specific inhibitors of chymase activity has been a pharmacologic strategy to develop therapeutic agents.

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