

## Human/Mouse Meprin β Subunit/MEP1B Alexa Fluor® 405-conjugated Antibody

Monoclonal Rat IgG<sub>1</sub> Clone # 289731 Catalog Number: FAB28951V

100 µg

DESCRIPTION	
Species Reactivity	Human/Mouse
Specificity	Detects the pro form of human or mouse Meprin β Subunit/MEP1B in Western blots. It does not react with the mature form.
Source	Monoclonal Rat IgG <sub>1</sub> Clone # 289731
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human embryonic kidney cell line HEK293-derived recombinant human Meprin β Subunit/MEP1B Thr23-Ser293 Accession # Q16820
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.

APP		

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.

Immunohistochemistry 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

Meprins are multimeric proteases composed of  $\alpha$  and  $\beta$  subunits, which are members of the astacin family of zinc endopeptidases (1, 2). Both subunits form disulfide-linked homo- or heterooligomers, which are also referred to as Meprin A (composed of  $\alpha$  subunits with or without  $\beta$  subunits) and Merpin B (composed of  $\beta$  subunits only) (3). Although the two subunits share 42% amino acid (aa) sequence identity, they differ significantly in their oligomeric structure, post-translational processing and subsequently cellular location, and substrate and peptide bond specificity (4). The 701 aa sequence of human Merpin  $\beta$  subunit precursor consists of a signal peptide (aa 1 to 21), a pro region (aa 22 to 61), and a mature chain (aa 62 to 701) containing catalytic (aa 62 to 259), MAM (aa 260 to 429), MATH (aa 430 to 585), EGF-like (aa 604 to 644), transmembrane (aa 653 to 673), and cytoplasmic (aa 674 to 701) domains.

## PRODUCT SPECIFIC NOTICES

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