

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Meprin α Subunit/MEP1A in direct ELISAs and Western blots. In direct ELISAs, less than 20% cross-reactivity with recombinant human MEP1A is observed and less than 5% cross-reactivity with recombinant mouse MEP1B is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant mouse Meprin α Subunit/MEP1A Val34-Arg615 Accession # NP_032611
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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.
Immunoprecipitation	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 α and β subunits, which are members of the astacin family of zinc endopeptidases (1, 2). Both subunits form disulfide-linked homo- or hetero-oligomers, which are also referred to as Meprin A (composed of α subunits with or without β subunits) and Meprin B (composed of β subunits only) (3). Although the two subunits share 42% identity in their amino acid sequence, they differ significantly in their oligomeric structure, post-translational processing and subsequently cellular location, and substrate and peptide bond specificity (4). The 760 amino acid sequence of mouse meprin α subunit precursor consists of a signal peptide (residues 1-33), a pro region (residues 34-77), and a mature chain (residues 78-760) containing the following domains, catalytic (residues 78-275), MAM (residues 276-445), MATH (residues 447-607), EGF-like (residues 684-724), transmembrane (residues 727-754), and cytoplasmic (residues 755-760) (5). The pro enzyme terminating at residue 615 was expressed and the secreted protein purified from conditioned medium. The molecular masses of recombinant mouse MEP1A are similar to those observed for the α subunit of rat Meprin A (6).

PRODUCT SPECIFIC NOTICES

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