

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Thimet Oligopeptidase/THOP1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 25% cross-reactivity with recombinant human Neurolysin is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 455710
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Thimet Oligopeptidase/THOP1 Lys2-Cys689 Accession # P52888
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.
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

Thimet Oligopeptidase/THOP1, also known as endopeptidase EC 3.4.24.15 (EP24.15), is a zinc peptidase of the M3 family that also includes neurolysin/EC 3.4.24.16 and mitochondrial intermediate peptidase (1). Widely expressed by mammalian tissues and reported to present in different subcellular locations, THOP1 is primarily a cytoplasmic enzyme. It is capable of hydrolyzing a number of bioactive peptides and peptides released by the proteosome, limiting antigenic presentation by MHC class I molecules (1-3). THOP1 also interacts with angiotensin II type I receptor and bradykinin B2 receptor (4). The amino acid sequence of human THOP1 is 90% and 86% identical to that of dog/mouse and rat, respectively.

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