

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human MMP-16/MT3-MMP in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human MMP-16/MT3-MMP Ala32-Gly291 (Ile152Asn) Accession # P51512
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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.
Immunohistochemistry	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

Matrix metalloproteinases (MMPs) are a family of zinc and calcium dependent endopeptidases with the combined ability to degrade all the components of the extracellular matrix (ECM). MMP-16 (MT3-MMP) is found in brain, lung, placenta, smooth muscle cells, and malignant tumor tissues including oral melanoma and renal carcinoma (1). MMP-16 has been shown to activate proMMP-2 and degrade various ECM components including native collagens (2, 3). MMP-16 has been proposed to possess the potential to directly enhance the growth and invasiveness of cells *in vivo*, two critical processes for development and carcinogenesis (4). Structurally, MMP-16 consists of the following domains: a pro domain containing the furin cleavage site, a catalytic domain containing the zinc-binding site, a hinge region, a hemopexin-like domain, a transmembrane domain, and a cytoplasmic tail (1). The structure of the catalytic domain in complex with a hydroxamate inhibitor has been solved (5). The rhMMP-16PC consists of the pro and catalytic domains, which can be activated by treatment with furin.

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