

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human MMP-19 in direct ELISAs.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human MMP-19 Leu229-Tyr508 Accession # Q99542
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.
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

MMP-19 (Matrix metalloprotease 19; also MMP-18 and MMP RAS1) is a 55-59 kDa member of the peptidase M10A family of enzymes. It is widely expressed, being secreted by stratum basale keratinocytes, smooth muscle cells, epiphyseal cartilage chondrocytes and monocytes/macrophages. MMP-19 has multiple substrates, including components of the basement membrane (type IV collagen; laminin; nidogen), fibronectin, aggrecan plus COMP, and IGFBP3, this latter cleavage resulting in the release of active IGF-I. Studies involving MMP-19 demonstrate an antiangiogenic function. This is attributable to the processing of plasminogen, generating angiostatin-like molecules, and the creation of an environment that promotes the ECM retention of soluble VEGF. Human proMMP-19 is 490 amino acids (aa) in length. It contains an autocleavable 9 kDa propeptide (aa 19-97) plus a 411 aa mature region (aa 98-508). The mature region contains a Zn catalytic region (aa 103-256) plus four hemopexin-like domains (aa 293-508). There are three additional potential isoforms. One shows an 88 aa substitution for aa 300-508, a second contains a 12 aa substitution for aa 1-298, while a third possesses an alternative start site at Met80. Over aa 229-508, human MMP-19 shares 76% aa identity with mouse MMP-19.

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