

DESCRIPTION

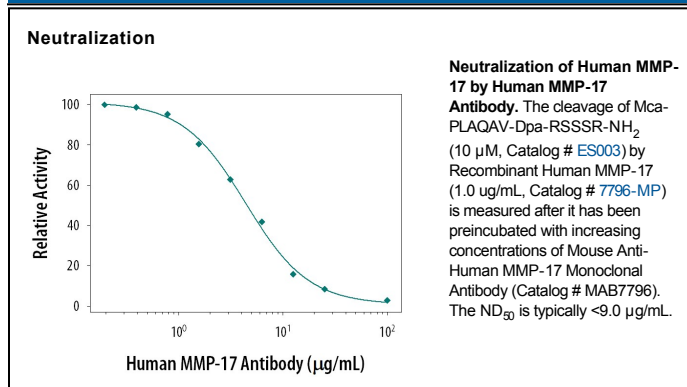
Species Reactivity	Human
Specificity	Detects human MMP-17 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human MMP-24 is observed.
Source	Monoclonal Mouse IgG _{2A} Clone # 823511
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human MMP-17 Pro42-Ala534 Accession # Q9ULZ9
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

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.

Neutralization	Measured by its ability to neutralize Recombinant Human MMP-17 (1.0 µg/mL, Catalog # 7796-MP) cleavage of the fluorogenic peptide substrate Mca-PLAQAV-Dpa-RSSSR-NH ₂ (10 µM, Catalog # ES003). The Neutralization Dose (ND ₅₀) is < 9.0 µg/mL.
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DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Matrix metalloproteinase 17 (MMP-17) is a zinc metalloproteinase that is an integral membrane protein (1). It belongs to the membrane-type MMP (MT-MMP) subfamily, and is also known as MT4-MMP. It is associated with the cell membrane by a glycosylphosphatidylinositol (GPI) anchor (1). It has the potential to function as a pro-tumor necrosis factor-α (TNF-α) convertase (2). Unlike MMP-14 (MT1-MMP), it is a poor activator of pro-MMP-2. MMP-17 is relatively poor at digesting components of the extracellular matrix but does cleave fibrinogen and fibrin (2). MMP-17 is known to activate the aggrecanase ADAMTS-4 through proteolysis (3). MMP-17 is expressed in many tissues with the highest levels seen in the brain, colon, ovary, testis, and kidney papilla (4). It has been detected in several human cancers, including gliomas, prostate carcinomas, and breast carcinomas (5).

References:

1. Itoh, Y. *et al.* (1999) *J. Biol. Chem.* **274**:34260.
2. English, W. R. *et al.* (2000) *J. Biol. Chem.* **275**:14046.
3. Gao, G. *et al.* (2004) *J. Biol. Chem.* **279**:10042.
4. Srichai, M. B. *et al.* (2011) *PLoS ONE* **6**:e17099.
5. Sohail, A. *et al.* (2008) *Cancer Metastasis Rev.* **27**:289.