

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects mouse MMP-24/MT5-MMP in direct ELISAs and detects human and mouse MMP-24/MT5-MMP in Western blots. In Western blots, less than 5% cross-reactivity with recombinant mouse (rm) MMP-3, rmMMP-9, and the catalytic domains of recombinant human MMP-14, 15, and 16 is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 143908
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse MMP-24/MT5-MMP Arg125-Gln296 Accession # Q9R0S2
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *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.

	Recommended Concentration	Sample
Flow Cytometry	0.25-1 µg/10 ⁶ cells	A172 human glioblastoma cell line and bEnd.3 mouse endothelioma cell line

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. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

MMP-24, also known as MT5-MMP, is a 62-65 kDa member of the M10 metalloproteinase family, a subfamily of MMPs. It is a type I transmembrane glycoprotein that is converted into a 58 kDa active form (amino acids [aa] 129-618) following removal of its propeptide. Proteolytic cleavage after Arg554 generates a 52 kDa active, soluble form that undergoes further cleavage in to 27-34 kDa fragment. MMP-24 has restricted expression, being found on neurons, mast cells, neural stem cells and ependymal cells lining the ventricles of the brain. It is known to cleave chondroitin sulfate, dermatan sulfate, pro-MMP-2, and N-Cadherin. Its activation of MMP-2 likely contributes to neurite outgrowth, while its cleavage of N-Cadherin in-trans between neural stem cells and ependymal initiates stem cell expansion and proliferation. Over amino acids 125-296, mouse MMP-24 shares 100% and 99% aa sequence identity with rat and human MMP-24, respectively.

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