Human MMP-14/MT1-MMP Alexa Fluor® 594-conjugated Antibody

Monoclonal Mouse IgG_{2B} Clone # 128527

Catalog Number: FAB9181T

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human MMP-14/MT1-MMP in direct ELISAs and Western blots. Does not detect *E. coli*-expressed recombinant human MMP-14 catalytic domain (aa 112-284).
Source	Monoclonal Mouse IgG_{2B} Clone # 128527
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human MMP-14/MT1-MMP Tyr112-Ala541 (predicted) Accession # P50281
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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	MDA-MB-231 human breast cancer 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.** ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

As the first member of membrane type (MT) MMPs, MMP-14, also known as MT1-MMP, plays an important role in extracellular matrix (ECM) remodeling by being able to degrade type I collagen, activate pro-MMP-2 and process cell adhesion molecules such as CD44 and integrin α_V (1). MMP-14 is therefore a key enzyme in many physiological and pathological processes such as angiogenesis and tumor invasion. Structurally, MMP-14 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 (2).

References:

1. Seike, M. (2003) Cancer Lett. **194**:1.
2. Sato, H. *et al.* (1994) Nature **370**:61.

PRODUCT SPECIFIC NOTICES

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