Data Sheet (Cat.No.TMAC-02619)

Anti-MMP-14 Antibody (7I45)

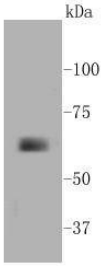
Product Details

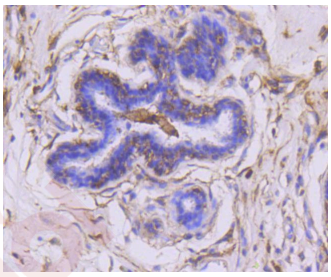
Ig Type:	IgG
Reactivity:	Human,Mouse,Rat
Conjugation:	Unconjugated
Molecular Weight:	Theoretical: 65 kDa.
Clone:	7I45
Purification:	Affinity-chromatography

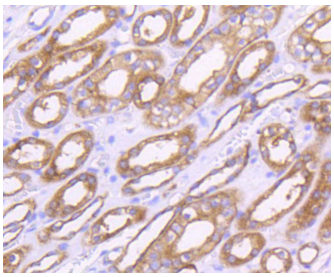
Applications

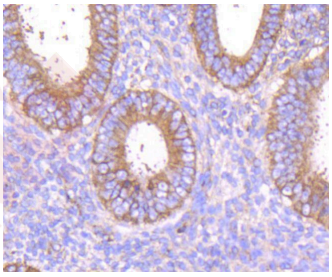
Verified Activity:

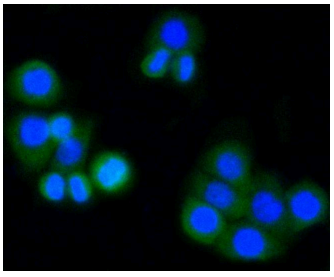
1. Western blot analysis of MMP14 on human kidney tissue lysates using anti-MMP14 antibody at 1/1,000 dilution.
2. Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using anti-MMP14 antibody. Counter stained with hematoxylin.
3. Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-MMP14 antibody. Counter stained with hematoxylin.
4. Immunohistochemical analysis of paraffin-embedded human uterus tissue using anti-MMP14 antibody. Counter stained with hematoxylin.
5. ICC staining MMP14 in CRC cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
6. ICC staining MMP14 in BT-20 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
7. Flow cytometric analysis of A549 cells with MMP14 antibody at 1/50 dilution (blue) compared with an unlabelled control (cells without incubation with primary antibody; red). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

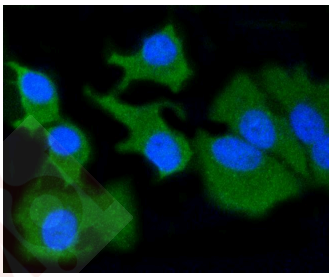


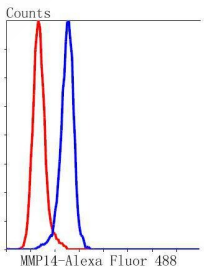












Application: FCM,ICC/IF,IHC,IP,WB

Recommended: WB: 1:1000-2000; IHC: 1:100-200; ICC/IF: 1:50-200; IP 1:20-50; FCM 1:20-100

Properties

Stability & Storage: Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.

Shipping: Shipping with blue ice.

Antigen Details

Immunogen:	A synthesized peptide: human MMP14
Antigen Species:	human
Uniprot ID:	P50281
Synonyms:	MMP14;MMP-X1;MT1-MMP;MMPX1;Membrane-type matrix metalloproteinase 1 (MT-MMP 1;MT 1-MMP;MT1MMP);MT-MMP1

Research Background

The matrix metalloproteinases (MMP) are a family of peptidase enzymes responsible for the degradation of extracellular matrix components, including collagen, gelatin, fibronectin, laminin and proteoglycan. Transcription of MMP genes is differentially activated by phorbol ester, lipopolysaccharide (LPS) or staphylococcal enterotoxin B (SEB). MMP catalysis requires both calcium and zinc. Membrane-type matrix metalloproteinases, including MT-MMP-1 (also designated MMP-14), MT-MMP-2 (also designated MMP-15), MT-MMP-3 (also designated MMP-16) and MT-MMP-4 (also designated MMP-17) are type I membrane proteins that function to activate other MMPs. MT-MMP activation appears to be mediated by members of the proprotein convertase family, suggesting that a proprotein convertase/MT-MMP/MMP cascade may be involved in the regulation of ECM turnover.