MMP1 Ab

Cat.#: BF0529	Concn.: 1mg/ml	Mol.Wt.: 54kDa
Size: 50ul,100ul,200ul	Source: Mouse	Clonality: Monoclonal

Application:	ELISA 1/10000, WB 1/500 - 1/2000, IHC 1/200 - 1/1000, ICC 1/200 - 1/1000, FCM 1/200 - 1/400
Reactivity:	Human
Purification:	Affinity-chromatography.
Specificity:	MMP1 Ab detects endogenous levels of total MMP1.
Immunogen:	Purified recombinant fragment of human MMP1 expressed in E. Coli.
Uniprot:	P03956
Description:	Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. Most MMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. This gene encodes a secreted enzyme which breaks down the interstitial collagens, types I, II, and III. The gene is part of a cluster of MMP genes which localize to chromosome 11q22.3. Alternative splicing results in multiple transcript variants.
Subcellular Location:	Secreted > extracellular space > extracellular matrix.
Similarity:	There are two distinct domains in this protein; the catalytic N-terminal, and the C-terminal which is involved in substrate specificity and in binding TIMP (tissue inhibitor of metalloproteinases).The conserved cysteine present in the cysteine-switch motif binds the catalytic zinc ion, thus inhibiting the enzyme. The dissociation of the cysteine from the zinc ion upon the activation-peptide release activates the enzyme.Belongs to the peptidase M10A family.
Storage Condition and Buffer:	Mouse IgG1 in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt.

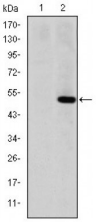
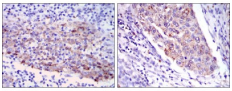
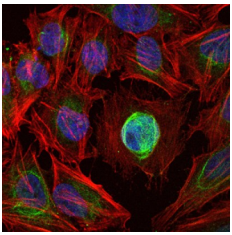


Figure 1: Western blot analysis using MMP1 mAb against HEK293 (1) and MMP1(AA: 24-213)-hIgGFc transfected HEK293 (2) cell lysate.



Immunohistochemical analysis of paraffin-embedded human cervical cancer tissues (left) and human kidney cancer tissues (right) using NFKB1 mouse mAb with DAB staining.



Immunofluorescence analysis of Hela cells using MMP1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

IMPORTANT: For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.