MMP13 (Cleaved-Tyr104) mouse mAb

Catalog No	BYmab-02311
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB
Gene Name	MMP13
Protein Name	MMP13 (Cleaved-Tyr104)
Immunogen	Synthesized peptide derived from human MMP13 (Cleaved-Tyr104)
Specificity	This antibody detects endogenous levels of Human MMP13 (Cleaved-Tyr104, protein was cleaved amino acid sequence between 103-104)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Collagenase 3 (EC 3.4.24.-;Matrix metalloproteinase-13;MMP-13)
Observed Band	42 53kD
Cell Pathway	Secreted, extracellular space, extracellular matrix . Secreted .
Tissue Specificity	Detected in fetal cartilage and calvaria, in chondrocytes of hypertrophic cartilage in vertebrae and in the dorsal end of ribs undergoing ossification, as well as in osteoblasts and periosteal cells below the inner periosteal region of ossified ribs. Detected in chondrocytes from in joint cartilage that have been treated with TNF and IL1B, but not in untreated chondrocytes. Detected in T lymphocytes. Detected in breast carcinoma tissue.
Function	skeletal system development, ossification, response to hypoxia, proteolysis, response to mechanical stimulus,response to abiotic stimulus, response to endogenous stimulus, response to hormone stimulus, response to organic substance, bone mineralization, embryonic limb morphogenesis, collagen catabolic process, biomineral formation,collagen metabolic process, appendage morphogenesis, limb morphogenesis, embryonic appendage morphogenesis,embryonic hindlimb morphogenesis, hindlimb

	morphogenesis, response to estrogen stimulus, multicellular organismal metabolic process, multicellular organismal catabolic process, multicellular organismal macromolecule metabolic process, response to steroid hormone stimulus, embryonic morphogenesis, appendage development, cartilage development, limb development, bone development, response to oxygen levels,
Background	cofactor:Binds 2 zinc ions per subunit.,cofactor:Binds 4 calcium ions per subunit.,disease:Defects in MMP13 are the cause of spondyloepimetaphyseal dysplasia type 2 (SEMD2) [MIM:602111]; also known as spondyloepimetaphyseal dysplasia type Missouri. SEMDs are a heterogeneous group of skeletal disorders characterized by defective growth and modeling of the spine and long bones. The SEMDs are distinguished from the spondylometaphyseal dysplasias and the spondyloepiphyseal dysplasias by the combined involvement of the epiphyses and metaphyses. The 3 disorders have malformations of the vertebrae in common.,domain: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.,function:Degrades collagen type I. Does not act on gelatin or casein. Could have a role in tumoral process.,similarity:Belongs to the peptidase M10A family.,similarity:Contains 4 hemopexin-like domains.,tissue specificity:Seems to be specific to breast carcinomas.,
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

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