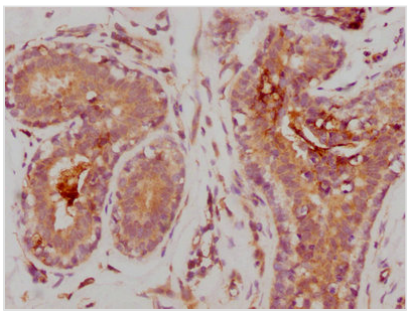
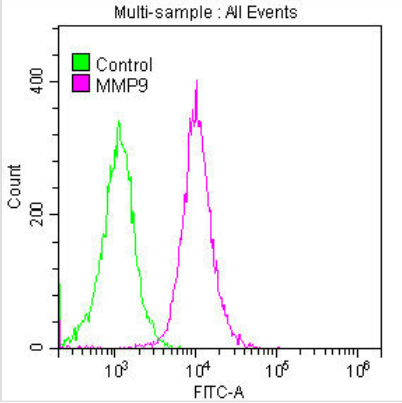
MMP9 Recombinant Monoclonal Antibody

Product Code	CSB-RA014679A0HU
Abbreviation	Matrix metalloproteinase-9
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P14780
Immunogen	A synthesized peptide derived from human MMP9
Species Reactivity	Human
Tested Applications	ELISA, IHC, FC; Recommended dilution: IHC:1:50-1:200
Relevance	May play an essential role in local proteolysis of the extracellular matrix and in leukocyte migration. Could play a role in bone osteoclastic resorption. Cleaves KiSS1 at a Gly-|-Leu bond. Cleaves type IV and type V collagen into large C-terminal three quarter fragments and shorter N-terminal one quarter fragments. Degrades fibronectin but not laminin or Pz-peptide.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Alias	Matrix metalloproteinase-9, MMP-9, 92 kDa gelatinase, 92 kDa type IV collagenase, Gelatinase B, GELB, 67 kDa matrix metalloproteinase-9, 82 kDa matrix metalloproteinase-9, MMP9, CLG4B
Immunogen Species	Homo sapiens (Human)
Research Area	Cardiovascular
Gene Names	MMP9
Clone No.	29C11

Image



IHC image of CSB-RA014679A0HU diluted at 1:235 and staining in paraffin-embedded human breast cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Overlay histogram showing Jurkat cells stained with CSB-RA014679A0HU (red line) at 1:50. The cells were fixed with 70% Ethylalcohol (18h) and then permeabilized with 0.3% Triton X-100 for 2 min. The cells were then incubated in 1x PBS /10% normal goat serum to block non-specific protein-protein interactions followed by primary antibody for 1 h at 4?. The secondary antibody used was FITC goat anti-rabbit IgG (H+L) at 1/200 dilution for 1 h at 4?. Control antibody (green line) was used under the same conditions. Acquisition of >10,000 events was performed.

Description

This is a recombinant monoclonal antibody against MMP9. It is matched isotype control by rabbit IgG. The cloning of the human MMP9 DNA gene into the vector and subsequent transfection into the cell line for in vitro expression lead to the production of this MMP9 antibody. This MMP9 antibody shows reactivity with human MMP9 protein. It has been purified using affinity-chromatography and been tested for use in ELISA, IHC, and FC applications.

MMP9 mainly functions to degrade the extracellular matrix (ECM) in a wide spectrum of physiology and pathophysiology processes involving tissue remodeling. It also plays important roles in immune cell function. MMP9 deletion promotes the recruitment of eosinophils and Th2 cells into the lungs during allergen challenge. MMP9 upregulation has been found during development and wound healing in pathophysiological conditions, as well as during pathologies that involve inflammatory processes, including arthritis, diabetes, and cancer.