Anti-Human MMP-8 Antibody [PSH03-34] - BSA and Azide free (Detector)

## HA721979

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	ELISA(Det)
Molecular Wt:	Predicted band size: 53.4 kDa
Clone number:	PSH03-34
Description:	This gene encodes a member of the matrix metalloproteinase (MMP) family of proteins. These proteins are involved in the breakdown of extracellular matrix in embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. Proteolysis at different sites on this protein results in multiple active forms of the enzyme with distinct N-termini. This protein functions in the degradation of type I, II and III collagens. The gene is part of a cluster of MMP genes which localize to chromosome 11q22.3. Alternative splicing results in multiple transcript variants.
lmmunogen:	Recombinant protein within Human MMP8 aa 21-467 (P22894).
Positive control:	Recombinant human MMP8 protein (HA210646).
Subcellular location:	Secreted
Database links:	SwissProt: P22894 Human
Recommended Dilutions: ELISA(Det)	Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH03-33] to Human MMP8 (Capture) (HA721978) and recombinant standard Human MMP8 (HA210646) as the standard. The reference range value is 20.6-5000 pg/ml.
Storage Buffer:	PBS (pH7.4).
Storage Instruction:	Store at +4 $^\circ\!\mathrm{C}$ after thawing. Aliquot store at -20 $^\circ\!\mathrm{C}$ . Avoid repeated freeze / thaw cycles.
Purity:	Protein A affinity purified.

# Hangzhou Huaan Biotechnology Co., Ltd.



Technical:0086-571-89986345

5 Service mail:support@huabio.cn



11.

Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

### HA721979 - Page 2

#### Images



Fig1: Sandwich ELISA analysis of human MMP8 matched pair antibodies

Elisa assay was performed by coating wells of a 96-well plate with 100 µl per well of capture antibody (HA721978) diluted in carbonate/bicarbonate buffer, at a concentration of 2 µg/mL overnight at 4°C. Wells of the plate were washed, blocked with 150 µl 0.05% tween-20 1% BSA blocking buffer, and incubated with serial diluted human MMP8 protein (HA210646) starting from 5000 pg/ml to 0 pg/ml and detect antibody (HA721979, Biotin, 0.2 µg/ml) for 1 hour at 30°C with shaking. Then the plate was washed and incubated with 100 µl per well of SA-HRP for 0.5 hour at 30°C with shaking. Detection was performed using an Ultra TMB Substrate for 10 minutes at room temperature in the dark. The reaction was stopped with sulfuric acid and absorbances were read on a spectrophotometer at 450 nm.



**Fig2:** The concentrations of MMP8 were measured in duplicates, interpolated from the MMP8 standard curves and corrected for sample dilution. The mean MMP8 concentration was determined to be 1043.74 pg/mL in A375 supernatant.



**Fig3:** The concentrations of MMP8 were measured in duplicates, interpolated from the MMP8 standard curves and corrected for sample dilution. The mean MMP8 concentration was determined to be 24841.38 pg/mL in SK-MeI-28 supernatant.

400 6 Undiluted 2X Diluted 4X Diluted 8 X Diluted 16X Diluted 32X Diluted 100 0 Undiluted 16X Diluted 32X Diluted 100 0 Undiluted 16X Diluted 16X Diluted 32X Diluted 100 0 Undiluted 16X Diluted 16X Dilu

**Fig4:** The concentrations of MMP8 were measured in duplicates, interpolated from the MMP8 standard curves and corrected for sample dilution. Undiluted sample is mixed human serum from twenty volunteers 1%. The mean MMP8 concentration was determined to be 240.35 ng/mL in mixed human serum from twenty volunteers.

### Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn



Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

#### **Background References**

- 1. Zhao Y., Zhang Q., Zhang X., Zhang Y., Lu Y., Ma X., Li W., Niu X., Zhang G., Tian Y. The roles of MMP8/MMP10 polymorphisms in ischemic stroke susceptibility. Brain Behav 12:e2797-e2797 (2022)
- Maghajothi S., Subramanian L., Mani P., Singh M., Iyer D.R., Sharma S., Khullar M., Victor S.M., Asthana S., Mahapatra N.R. A common Matrix metalloproteinase 8 promoter haplotype enhances the risk for hypertension via diminished interactions with nuclear factor kappa B. J Hypertens 40:2147-2160 (2022)

## Hangzhou Huaan Biotechnology Co., Ltd.



Orders:0086-571-88062880

Technical:0086-571-89986345

5 Service mail:support@huabio.cn

Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cetl=Immunofluorescence (Cetl) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation