

**MOUSE ANTI-HUMAN MMP-2 (PROFORM)
MONOCLONAL ANTIBODY**

CATALOG NUMBER:	MAB13405	QUANTITY:	100 µg
LOT NUMBER:	xxxxxxx	CONCENTRATION:	200 µg/mL
ALTERNATE NAMES:	Gelatinase A; 72 kDa Type IV Collagenase	EPITOPE:	N-terminus
CLONE NAME:	CA-4001	HOST/ISOTYPE:	Ms IgG1
SPECIFICITY:	It recognizes a protein of 72 kDa which is identified as pro (latent) form (active form is 62 kDa) of matrix metalloproteinase-2 and any fragment with N-terminal (proform) domain still attached. Antibody shows no cross-reaction with pro and active forms of MMP-9. MMP-2 is synthesized as 631 amino acid proenzyme which is activated by cleavage of the first 80 amino acids. MMPs have a common mode of activation, a conserved amino acid sequence in the putative metal binding-active site region, and are inhibited by specific tissue inhibitors of metalloproteinases (TIMPs). Cellular Localization: Cytoplasmic.		
IMMUNOGEN:	N-terminal peptide APSPIIKFPGDVAPKTDK of procollagenase IV, coupled to KLH.{Marquies, et al 1992}		
APPLICATIONS:	<p><u>Western Blot</u> (0.5-1.0 µg/mL for 2 hours at room temperature, <u>non-reduced conditions</u>. However, chicken samples react best when fully reduced. Antibody dilution buffers should be simple for best results, PBS or TBS with 0.05% tween only. Immunogen used is highly conserved between species, thus immunoabsorption to pro-MMP2 in milk may impair reactivity.</p> <p><u>Immunohistochemistry</u> on frozen and formalin-fixed, paraffin-embedded tissue sections: 2-4 µg/mL for 30 minutes at room temperature. {Sefor, et al 2001} and {Gottsch ML et al 2002}. Antigen retrieval is optional in most cases. Antibody dilution solutions should not contain serum because of possible immunoabsorption of the antibody to proMMP2 present in the solution.</p> <p><u>Blocking:</u> Inhibition of MMP-2 Activity (2-4 µg/mL).</p> <p>Optimal working dilutions must be determined by end user.</p>		
SPECIES REACTIVITY:	Reacts with Human, Mouse, and Rat. Reactivity with other species has not been determined.		
CONTROL:	POSITIVE CONTROL: HFL-1 cells. Conditioned, serum-free medium from (TPA-treated) human fetal lung cells. Placenta.		

For research use only; not for use as a diagnostic.

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- PRESENTATION:** Purified from ascites fluid by Protein G chromatography. Liquid in 10 mM PBS, pH 7.4, with 0.2% BSA and 15 mM sodium azide.
- STORAGE/HANDLING:** Maintain at 2-8°C in undiluted aliquots for up to 12 months.
- REFERENCES:**
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- Schnaper, H.W. et al. (1993). *J. of Cellular Physiology* 156(2):235-246.
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Important Note: *During shipment, small volumes of product will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µL or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.*

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