

**bs-0412R****[ Primary Antibody ]****MMP2 Rabbit pAb****Bioss**  
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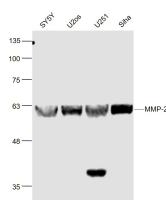
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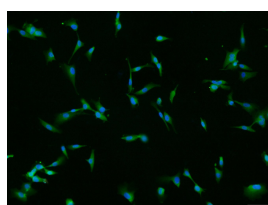
**DATASHEET****Host:** Rabbit**Isotype:** IgG**Clonality:** Polyclonal**GeneID:** 4313**SWISS:** P08253**Target:** MMP2**Immunogen:** KLH conjugated synthetic peptide derived from human MMP2: 31-109/476.**Purification:** affinity purified by Protein A**Concentration:** 1mg/ml**Storage:** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

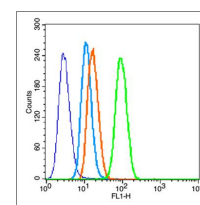
**Background:** Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. Most MMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. This gene encodes an enzyme which degrades type IV collagen, the major structural component of basement membranes. The enzyme plays a role in endometrial menstrual breakdown, regulation of vascularization and the inflammatory response. Mutations in this gene have been associated with Winchester syndrome and Nodulosis-Arthropathy-Osteolysis (NAO) syndrome. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq].

**Applications:** WB (1:1000-5000)**IHC-P** (1:200-800)**IHC-F** (1:200-800)**IF** (1:200-800)**Flow-Cyt** (1µg/Test)**ICC/IF** (1:100-500)**Reactivity:** Human (predicted: Mouse, Rat, Rabbit, Pig, Sheep, Cow, Horse)**Predicted MW.:** 72 kDa**Subcellular Location:** Secreted ,Extracellular matrix ,Cell membrane ,Cytoplasm ,Nucleus**VALIDATION IMAGES**

Sample: SY5Y (Human) Cell Lysate at 30 ug U2os (Human) Cell Lysate at 30 ug U251 (Human) Cell Lysate at 30 ug SiHa (Human) Cell Lysate at 30 ug  
 Primary: Anti- MMP-2 (bs-0412R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 62 kD Observed band size: 60 kD



Tissue/cell: U-87MG cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (MMP2)polyclonal Antibody, Unconjugated (bs-0412R) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



Blank control (blue line): HeLa (blue). Primary Antibody (green line): Rabbit Anti-MMP2 antibody (bs-0412R) Dilution: 1µg/10<sup>6</sup> cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody (white blue line): Goat anti-rabbit IgG-FITC Dilution: 1µg/test. Protocol The cells were fixed with 80% methanol (5 min at -20°C) and then permeabilized with 0.1% PBS-Tween for 20 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The cells were then incubated in 1 X PBS/2%BSA/10% goat serum to block non-specific protein-protein interactions followed by the antibody for 15 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

## — SELECTED CITATIONS —

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- **[IF=17.4]** Hui Yan. et al. Elaboration a ROS-responsive darutigenol prodrug nanoassemblies for inflammatory arthritis treatment. NANO TODAY. 2024 Apr;55:102220 WB ;Mouse. 10.1016/j.nantod.2024.102220
- **[IF=10.7]** Rolf Schreckenber. et al. Inhibition of MMP2 activity mitigates N-omega-nitro-L-arginine-methyl ester (L-NAME)-induced right heart failure. REDOX BIOL. 2024 Aug;:103308 WB ;Rat. 39167912
- **[IF=7.097]** Liting Cheng. et al. Bioresponsive micro-to-nano albumin-based systems for targeted drug delivery against complex fungal infections. Acta Pharm Sin B. 2021 May;: IF ;Mouse. 10.1016/j.apsb.2021.04.020
- **[IF=7.129]** Qianfeng Liu. et al. Perfluoroalkyl substances promote breast cancer progression via ER $\alpha$  and GPER mediated PI3K/Akt and MAPK/Erk signaling pathways. ECOTOX ENVIRON SAFE. 2023 Jun;258:114980 WB ;Human. 37148752
- **[IF=7.126]** Vendrov AE et al.NOXA1-dependent NADPH oxidase regulates redox signaling and phenotype of vascular smooth muscle cell during atherogenesis.Redox Biol. (2018) Redox Biol. 21:101063. IF ;Mouse. 30576919