



20150116ML

Anti-Mouse HPRG (#9G42)

**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

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|------------------|----------------------------|
| Cat.-no.: | 103-M232 |
| Size: | 100 µg |
| Lot. No.: | According to product label |

Preparation: This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a rat immunized with purified mouse recombinant protein of HPRG. The IgG2 fraction of the culture supernatant was purified by Protein A/G affinity chromatography.

Target Background

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|---------------------------|---|
| Synonyms (Target): | Hrg; Hprg; Hrgp; D16jh2; D18020; AI265597; AW413091 |
|---------------------------|---|

Human histidine-rich glycoprotein (HPRG) is a multidomain, monomeric, secreted, 67-75 kDa member of the cystatin superfamily of molecules. Its name derives from the fact that 26% of its amino acids (aa) are histidine and proline. In human, it is synthesized as a 525 aa precursor that contains an 18 aa signal sequence and a 507 aa mature region. Five distinct domains are recognized in the mature molecule. There are two N-terminal cystatin-like modules (aa 19-254) and one His-Pro-rich region (aa 350-497) that is flanked by two Pro-rich segments (aa 276-321 and 498-525). The His-Pro-rich region contains 10 tandem repeats with an HHPHG motif, and the N- and C-termini are linked by a disulfide bond. Human HPRG is only 60% aa identical to mouse HPRG. There are multiple ligands for HPRG. These include small molecular weight molecules (metal ions; heme), hemostatic molecules (heparan sulfate; TSP; plasminogen), and immune system components (T cells; macrophages). About 50% of plasma plasminogen circulates bound to HPRG. Upon immobilization to cell surface tropomyosin in a Zn⁺⁺ dependent manner, it is converted to plasmin by tPA. HPRG also shows anti-angiogenic activity on vascular endothelial cells.

Database References Target

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|------------------------|-------------|
| Protein RefSeq: | NP_444406.2 |
| Uniprot ID: | Q9ESB3 |
| mRNA RefSeq: | NM_053176.2 |

Product Specifications

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|------------------------------|-----------------------------------|
| Host | Rat |
| Reactivity against | Mouse |
| Clonality | Monoclonal Antibody |
| Clone | (#9G42) |
| Isotype | IgG |
| Purification | Protein G/A chromatography |
| Antigen | recombinant mouse protein of HPRG |
| Formulation | lyophilized |
| Reconstitution buffer | PBS (sterile) |

Reconstitution: Reconstitute the antibody with 200 µl sterile PBS and the final concentration is 500 µg/ml.

Stability: Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

Remarks: This antibody detects mouse HPRG in Western blotting.

**AVOID REPEATED FREEZE AND THAW CYCLES!**

Applications

The antibody can be used within the following applications:

WB

Recommended usage:**WB:** 1:500-1000

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!