

Anti-HRG Picoband Antibody

Catalog # ABO11911

Product Information

Application	WB, IHC-P
Primary Accession	P04196
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Histidine-rich glycoprotein(HRG) detection. Tested with WB, IHC-P in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	3273
Other Names	Histidine-rich glycoprotein, Histidine-proline-rich glycoprotein, HPRG, HRG
Calculated MW	59578
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat Western blot, 0.1-0.5 µg/ml, Human
Subcellular Localization	Secreted .
Tissue Specificity	Expressed in macrophages and in malignant cells. Expressed by the liver and secreted in plasma (at protein level). .
Source	Eukaryota
Protein Name	Histidine-rich glycoprotein
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	E.coli-derived human HRG recombinant protein (Position: V19-V200). Human HRG shares 71% and 69% amino acid (aa) sequences identity with mouse and rat HRG, respectively.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also

be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Protein Information

Name	HRG
Function	Plasma glycoprotein that binds a number of ligands such as heme, heparin, heparan sulfate, thrombospondin, plasminogen, and divalent metal ions. Binds heparin and heparin/glycosaminoglycans in a zinc-dependent manner. Binds heparan sulfate on the surface of liver, lung, kidney and heart endothelial cells. Binds to N-sulfated polysaccharide chains on the surface of liver endothelial cells. Inhibits rosette formation. Acts as an adapter protein and is implicated in regulating many processes such as immune complex and pathogen clearance, cell chemotaxis, cell adhesion, angiogenesis, coagulation and fibrinolysis. Mediates clearance of necrotic cells through enhancing the phagocytosis of necrotic cells in a heparan sulfate-dependent pathway. This process can be regulated by the presence of certain HRG ligands such as heparin and zinc ions. Binds to IgG subclasses of immunoglobins containing kappa and lambda light chains with different affinities regulating their clearance and inhibiting the formation of insoluble immune complexes. Tethers plasminogen to the cell surface. Binds T-cells and alters the cell morphology. Modulates angiogenesis by blocking the CD6-mediated antiangiogenic effect of thrombospondins, THBS1 and THBS2. Acts as a regulator of the vascular endothelial growth factor (VEGF) signaling pathway; inhibits endothelial cell motility by reducing VEGF-induced complex formation between PXN/paxillin and ILK/integrin-linked protein kinase and by promoting inhibition of VEGF-induced tyrosine phosphorylation of focal adhesion kinases and alpha-actinins in endothelial cells. Also plays a role in the regulation of tumor angiogenesis and tumor immune surveillance. Normalizes tumor vessels and promotes antitumor immunity by polarizing tumor-associated macrophages, leading to decreased tumor growth and metastasis.
Cellular Location	Secreted.
Tissue Location	Expressed in macrophages and in malignant cells. Expressed by the liver and secreted in plasma (at protein level)

Background

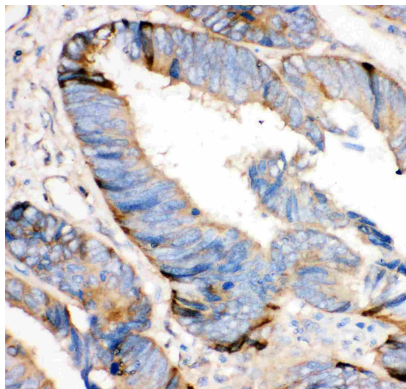
Histidine-rich glycoprotein (HRG) is a protein that in humans is encoded by the HRG gene. It is mapped to 3q27.3. HRG contains two cystatin-like domains and is located in plasma and platelets. The protein can bind heme, dyes and divalent metal ions. It also can inhibit rosette formation and interacts with heparin, thrombospondin and plasminogen. Two of the protein's effects, the inhibition of fibrinolysis and the reduction of inhibition of coagulation, indicate a potential prothrombotic effect. Mutations in this gene lead to thrombophilia due to abnormal histidine-rich glycoprotein levels. HRG is thought to have multiple roles as a protein in the human blood, including roles in immunity, angiogenesis and coagulation.

Images

Anti- HRG antibody, ABO11911, Western blottingAll lanes:
Anti HRG (ABO11911) at 0.5ug/mlWB: Recombinant
Human HRG Protein 0.5ngPredicted bind size:
40KDObserved bind size: 40KD



Anti- HRG antibody, ABO11911, Western blotting
 All lanes:
 Anti HRG (ABO11911) at 0.5ug/ml
 WB: Human Placenta
 Tissue Lysate at 50ug
 Predicted bind size: 60KD
 Observed
 bind size: 60KD



Anti- HRG antibody, ABO11911, IHC(P)
 IHC(P): Human
 Intestinal Cancer Tissue

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.