

Anti-HRG Picoband Antibody

Catalog # ABO11911

Specification

Anti-HRG Picoband Antibody - Product Information

Application	WB, IHC-P
Primary Accession	<u>P04196</u>
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	
Rabbit IgG polyclonal antibody for	^r 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.

Anti-HRG Picoband Antibody - Additional Information

Gene ID 3273

Other Names Histidine-rich glycoprotein, Histidine-proline-rich glycoprotein, HPRG, HRG

Calculated MW 59578 MW KDa

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). .

Protein Name Histidine-rich glycoprotein

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

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 r°Constitution, 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.

Anti-HRG Picoband Antibody - 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 antiangiongenic 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)

Anti-HRG Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence



Immunoprecipitation

- <u>Flow Cytomety</u>
- <u>Cell Culture</u>

Anti-HRG Picoband Antibody - 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

116KD —
97KD —
58KD
40KD —
29KD —
20KD —
14KD -

Anti- HRG antibody, ABO11911, Western blottingAll lanes: Anti HRG (ABO11911) at 0.5ug/mlWB: Human Placenta Tissue Lysate at 50ugPredicted bind size: 60KDObserved bind size: 60KD





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

Anti-HRG Picoband Antibody - 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.