

HRG Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7327a

Specification

HRG Antibody (N-term) - Product Information

Application	IHC-P, WB,E
Primary Accession	P04196
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	59578
Antigen Region	13-42

HRG Antibody (N-term) - Additional Information

Gene ID 3273

Other Names

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

Target/Specificity

This HRG antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 13-42 amino acids from the N-terminal region of human HRG.

Dilution

IHC-P~~1:50~100

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

HRG Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

HRG Antibody (N-term) - 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.

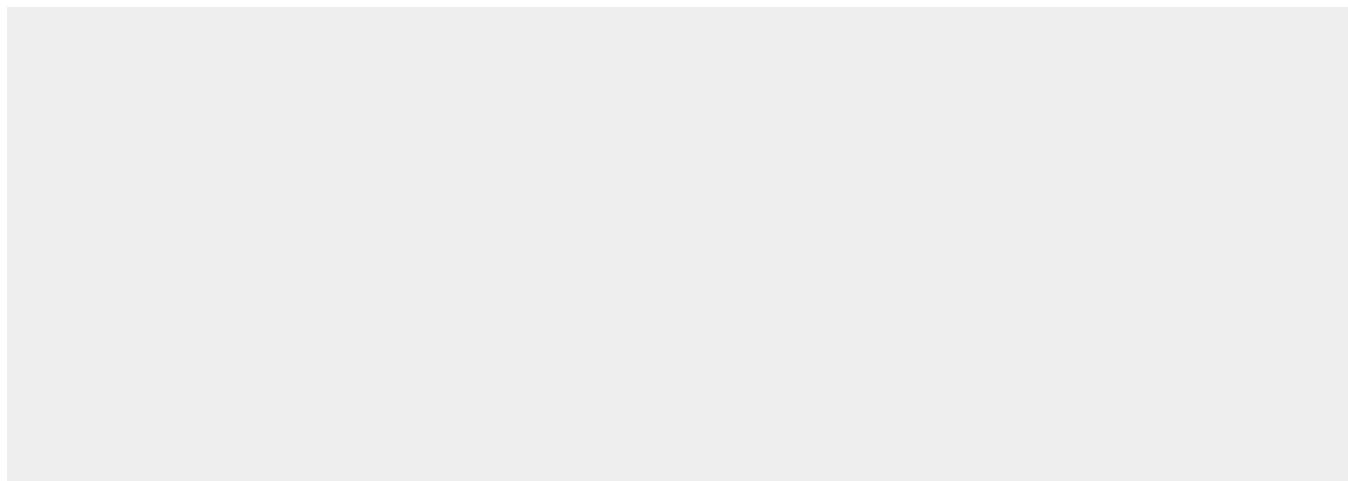
Tissue Location

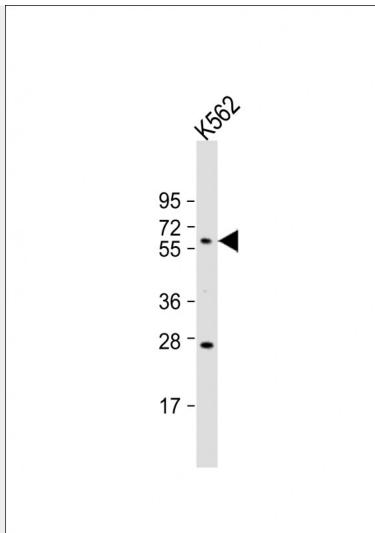
Expressed in macrophages and in malignant cells. Expressed by the liver and secreted in plasma (at protein level)

HRG Antibody (N-term) - Protocols

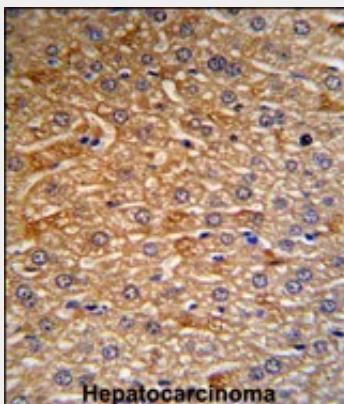
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

HRG Antibody (N-term) - Images



Anti-HRG Antibody (N-term) at 1:1000 dilution + K562 whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 60 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



HRG Antibody (N-term) (RB18729) IHC analysis in formalin fixed and paraffin embedded human hepatocarcinoma tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the HRG Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

HRG Antibody (N-term) - Background

HRG contains two cystatin-like domains and is located in plasma and platelets. The physiological function has not been determined but it is known that the protein binds heme, dyes and divalent metal ions. It 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 Antibody (N-term) - References

Vanwildegemersch,M., Olsson,A.K. *J. Biol. Chem.* 281 (15), 10298-10304 (2006)
Jones,A.L., Poon,I.K. *J. Biol. Chem.* 280 (42), 35733-35741 (2005)
Hennis,B.C. and Kluft,C. *Nucleic Acids Res.* 19 (15), 4311 (1991)