



# Mouse Anti-Human HRG/HPRG monoclonal antibody, clone NN12 (CABT-ZB524)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Specificity</b>	It reacts with Human HRG/HPRG
<b>Target</b>	HRG
<b>Immunogen</b>	Recombinant Human HPRG protein
<b>Isotype</b>	IgG
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Clone</b>	NN12
<b>Purification</b>	Protein A purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	ELISA, ELISA(cap) This antibody will detect HRG/HPRG in antibody pair set. [ABPR-ZB100]
<b>Preparation</b>	This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Human HPRG. The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
<b>Format</b>	Purified, Liquid
<b>Concentration</b>	Lot specific
<b>Size</b>	50 µL, 100 µL, 200 µL, 1 mL

<b>Buffer</b>	PBS
<b>Preservative</b>	None
<b>Storage</b>	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
<b>Ship</b>	Wet ice

## BACKGROUND

**Introduction** Histidine-rich glycoprotein, also known as HRG and HPRG, is a glycoprotein located in plasma and platelets and contains an unusually large amount of histidine and proline. In humans, five distinct domains are recognized in the mature HPRG 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 HPHG motif, and the N- and C-termini are linked by a disulfide bond. The specific functions of HRG remain unclear, but it is known that the protein binds heme, dyes, and divalent metal ions. It inhibits 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. HPRG is evolutionarily, functionally, and structurally related to cleaved high molecular weight kininogen (HKa), an anti-angiogenic polypeptide that stimulates apoptosis of proliferating endothelial cells through binding to cell-surface tropomyosin. The antiangiogenic activity of the multidomain plasma protein HPRG is localized to its histidine-proline-rich (H/P) domain and has recently been shown to be mediated, at least partially, through binding to cell-surface tropomyosin in fibroblast growth factor-2-activated endothelial cells.

**Keywords** HRG; histidine-rich glycoprotein; histidine proline rich glycoprotein; HPRG

## GENE INFORMATION

**Synonyms** HRG; histidine-rich glycoprotein; histidine proline rich glycoprotein; HPRG; HRGP; thrombophilia due to elevated HRG; DKFZp779H1622; Histidine proline rich glycoprotein; Histidine rich glycoprotein; HPRG; HRGP; Thrombophilia due to elevated HRG; OTTHUMP00

**Entrez Gene ID** [3273](#)

**UniProt ID** [P04196](#)