

## HPRG (C-12): sc-47041

### BACKGROUND

The exact function of the histidine-proline-rich glycoprotein (HPRG) is not yet known. The HPRG protein sequence has a high proline and histidine content and has many internal repeat sequences. HPRG binds dyes, heme and divalent metal ions and can inhibit rosette formation. This protein has been shown to interact with thrombospondin, heparin and plasminogen. It may also play a role in mediating the contact activation phase of the intrinsic blood coagulation cascade. HPRG is expressed by the liver and is detected as a secreted protein in plasma.

### REFERENCES

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- Donate, F., Juarez, J.C., Guan, X., Shipulina, N.V., Plunkett, M.L., Tel-Tsur, Z., Shaw, D.E., Morgan, W.T. and Mazar, A.P. 2004. Peptides derived from the histidine-proline domain of the histidine-proline-rich glycoprotein bind to tropomyosin and have antiangiogenic and antitumor activities. *Cancer Res.* 64: 5812-5817.
- Guan, X., Juarez, J.C., Qi, X., Shipulina, N.V., Shaw, D.E., Morgan, W.T., McCrae, K.R., Mazar, A.P. and Donate, F. 2004. Histidine-proline rich glycoprotein (HPRG) binds and transduces antiangiogenic signals through cell surface tropomyosin on endothelial cells. *Thromb. Haemost.* 92: 403-412.

### CHROMOSOMAL LOCATION

Genetic locus: Hrg (mouse) mapping to 8 A3.

### SOURCE

HPRG (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of HPRG of mouse origin.

### PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-47041 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

HPRG (C-12) is recommended for detection of mature HRG and HPRG precursor of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for HPRG siRNA (m): sc-60809, HPRG shRNA Plasmid (m): sc-60809-SH and HPRG shRNA (m) Lentiviral Particles: sc-60809-V.

Molecular Weight of HPRG: 70-95 kDa.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **HPRG (G-10): sc-398239**, our highly recommended monoclonal alternative to HPRG (C-12).