

# HDGFRP3 (Q-13): sc-55228

## BACKGROUND

HDGFRP3 (hepatoma-derived growth factor-related protein 3), also known as HRP-3 or HDGF-2, is a 203 amino acid nuclear protein belonging to the HDGF family and containing one PWWP domain. HDGF was initially characterized as a secreted mitogen from the Huh-7 human hepatoma cell line. HDGF is also reported to be involved in organ development and lung remodeling after injury by promoting proliferation of lung epithelial cells. HDGFRP3 is thought to be a radioresistance-related gene, regulating the radio- and chemo-resistant phenotype by reactive oxygen species-dependent p53 activation. HDGFRP3 is also thought to promote neurite outgrowth in cortical neurons via microtubule interaction, and may play a role in cell proliferation and enhance DNA synthesis. The HDGFRP3 gene is located on human chromosome 15 and conserved in mouse, rat, chimpanzee, bovine, canine and more.

## REFERENCES

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- El-Tahir, H.M., et al. 2009. Hepatoma-derived growth factor-related protein-3 interacts with microtubules and promotes neurite outgrowth in mouse cortical neurons. *J. Biol. Chem.* 284: 11637-11651.
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- Zhu, J., et al. 2013. Protein interaction discovery using parallel analysis of translated ORFs (PLATO). *Nat. Biotechnol.* 31: 331-334.

## CHROMOSOMAL LOCATION

Genetic locus: HDGFRP3 (human) mapping to 15q11.2; Hdgfrp3 (mouse) mapping to 7 D3.

## SOURCE

HDGFRP3 (Q-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of HDGFRP3 of human 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-55228 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

HDGFRP3 (Q-13) is recommended for detection of HDGFRP3 of mouse and human 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 HDGFRP3 siRNA (h): sc-72347, HDGFRP3 siRNA (m): sc-72348, HDGFRP3 shRNA Plasmid (h): sc-72347-SH, HDGFRP3 shRNA Plasmid (m): sc-72348-SH, HDGFRP3 shRNA (h) Lentiviral Particles: sc-72347-V and HDGFRP3 shRNA (m) Lentiviral Particles: sc-72348-V.

Molecular Weight of HDGFRP3: 30 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.


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Try **HDGFRP3 (G-10): sc-390944**, our highly recommended monoclonal alternative to HDGFRP3 (Q-13).