Hrs (V-20): sc-23791



The Power to Question

BACKGROUND

The hepatocyte growth factor-regulated tyrosine kinase substrate (Hrs) is a zinc-finger protein that interacts with STAM and undergoes tyrosine phosphorylation in response to IL2, CSF2 or HGF. Hrs is involved in intracellular trafficking and signal transduction and is associated with early endosomes. Hrs contains a phosphatidylinositol 3-phosphate-binding domain that contributes to its endosomal targeting, where Hrs co-localizes with Clathrin via a Clathrin box motif at the carboxy-terminus of Hrs. Hrs is essential for ventral folding morphogenesis and shares structual similarity to the yeast protein Vps27p, which is involved in vacuolar protein sorting. The human Hrs gene, which maps to chromosome 17q25.3, enodes a 777 amino acid protein. In Schwann cells, Hrs co-localizes at endosomes with the tumor suppressor protein schwannomin, suggesting a role for schwannomin in Hrs-mediated cell signaling.

CHROMOSOMAL LOCATION

Genetic locus: HGS (human) mapping to 17q25.3; Hgs (mouse) mapping to 11 E2.

SOURCE

Hrs (V-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Hrs of human origin.

PRODUCT

Each vial contains 100 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-23791 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Hrs (V-20) is recommended for detection of Hrs of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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).

Hrs (V-20) is also recommended for detection of Hrs in additional species, including canine, bovine and avian.

Suitable for use as control antibody for Hrs siRNA (h): sc-41232, Hrs siRNA (m): sc-41233, Hrs shRNA Plasmid (h): sc-41232-SH, Hrs shRNA Plasmid (m): sc-41233-SH, Hrs shRNA (h) Lentiviral Particles: sc-41232-V and Hrs shRNA (m) Lentiviral Particles: sc-41233-V.

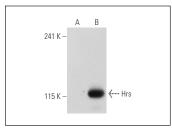
Molecular Weight of Hrs: 115 kDa.

Positive Controls: Hrs (h): 293T Lysate: sc-159949, Hrs (m): 293T Lysate: sc-125474 or K-562 whole cell lysate: sc-2203.

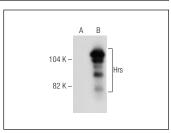
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA







Hrs (V-20): sc-23791. Western blot analysis of Hrs expression in non-transfected: sc-110760 (A) and human Hrs transfected: sc-159949 (B) 293 whole cell lysates

SELECT PRODUCT CITATIONS

 Haag, J., et al. 2006. Hgs physically interacts with Smad5 and attenuates BMP signaling. Exp. Cell Res. 312: 1153-1163.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **Hrs (C-7):** sc-271455 or **Hrs (D-11):** sc-271160, our highly recommended monoclonal alternatives to Hrs (V-20).

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