

Hrs (M-79): sc-30221

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. H contains a phosphatidylinositol 3-phosphate-binding domain that contributes to its endosomal targeting, where Hrs colocalizes with Clathrin via a Clathrin box motif at the carboxy terminus of Hrs. Hrs is essential for ventral folding morphogenesis and shares structural similarity to the yeast protein Vps27p, which is involved in vacuolar protein sorting. The human Hrs gene, which maps to chromosome 17q25.3, encodes a 777 amino acid protein. In Schwann cells, Hrs colocalizes 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 (M-79) is a rabbit polyclonal antibody raised against amino acids 573-651 mapping near the C-terminus of Hrs 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.

APPLICATIONS

Hrs (M-79) 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 µg per 100-500 µg 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 (M-79) is also recommended for detection of Hrs in additional species, including equine.

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): 293 Lysate: sc-159949, M1 whole cell lysate: sc-364782 or K-562 whole cell lysate: sc-2203.

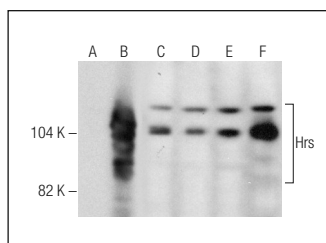
STORAGE

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

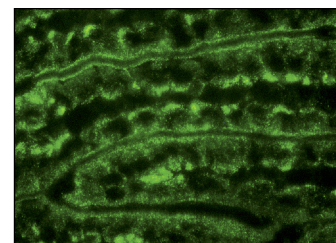
RESEARCH USE

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

DATA



Hrs (M-79): sc-30221. Western blot analysis of Hrs expression in non-transfected 293: sc-110760 (A), human Hrs transfected 293: sc-159949 (B), HEL 92.1.7 (C), AML-193 (D), K-562 (E) and M1 (F) whole cell lysates.



Hrs (M-79): sc-30221. Immunofluorescence staining of normal mouse intestine frozen section showing cytoplasmic staining.

SELECT PRODUCT CITATIONS

1. Malik, R. and Marchese, A. 2010. Arrestin-2 interacts with the endosomal sorting complex required for transport machinery to modulate endosomal sorting of CXCR4. *Mol. Biol. Cell* 21: 2529-2541.
2. Catarino, S., et al. 2011. Ubiquitin-mediated internalization of connexin43 is independent of the canonical endocytic tyrosine-sorting signal. *Biochem. J.* 437: 255-267.
3. Gasparrini, F., et al. 2012. Syk-dependent regulation of Hrs phosphorylation and ubiquitination upon FcεRI engagement: Impact on Hrs membrane/cytosol localization. *Eur. J. Immunol.* 42: 2744-2753.
4. Shea, F.F., et al. 2012. Mammalian α arrestins link activated seven transmembrane receptors to Nedd4 family e3 ubiquitin ligases and interact with β arrestins. *PLoS ONE* 7: e50557.
5. Dahlhoff, M., et al. 2012. Negative feedback mechanisms surpass the effect of intrinsic EGFR activation during skin chemical carcinogenesis. *Am. J. Pathol.* 180: 1378-1385.

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 (M-79).