

EHD4 (P-16): sc-65106

BACKGROUND

Eps15 homology domain (EHD)-containing proteins function in the exit of receptors and other membrane proteins from the endosomal recycling compartment. EHD4 (Eps15 homology domain-containing protein 4), also known as PAST4 or Pincher, belongs to a subfamily of the EHD protein family that includes the closely related proteins EHD1, EHD2 and EHD3. EHD4 is predominantly expressed in pancreas and heart, localizing to vesicular and tubular structures in the cell. It contains an EH domain as well as a calcium binding EF hand. EHD4 is believed to function in transport from the early endosome to the endocytic recycling compartment. In addition, EHD4 is capable of binding lipids via its EH domain. Loss of EHD4 can lead to retention of transferrin in peripheral compartments suggesting that EHD4 regulates the transport of transferrin out of the early endosome.

REFERENCES

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5. Smith, C.A., et al. 2004. The cell fate determinant numb interacts with EHD/Rme-1 family proteins and has a role in endocytic recycling. *Mol. Biol. Cell* 15: 3698-3708.
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CHROMOSOMAL LOCATION

Genetic locus: EHD4 (human) mapping to 15q15.1; Ehd4 (mouse) mapping to 2 E5.

SOURCE

EHD4 (P-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of EHD4 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-65106 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

EHD4 (P-16) is recommended for detection of EHD4 of mouse, rat 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).

EHD4 (P-16) is also recommended for detection of EHD4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for EHD4 siRNA (h): sc-40521, EHD4 siRNA (m): sc-40522, EHD4 shRNA Plasmid (h): sc-40521-SH, EHD4 shRNA Plasmid (m): sc-40522-SH, EHD4 shRNA (h) Lentiviral Particles: sc-40521-V and EHD4 shRNA (m) Lentiviral Particles: sc-40522-V.

Molecular Weight of EHD4: 64 kDa.

Positive Controls: HeLa nuclear extract: sc-2120.

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 or our catalog for detailed protocols and support products.



Try **EHD4 (E-2): sc-376373**, our highly recommended monoclonal alternative to EHD4 (P-16).