epsin 2 (S-20): sc-31647



The Power to Overtin

BACKGROUND

Elucidation of the mechanism by which receptor tyrosine kinases (RTKs) modulate cellular physiology in response to stimuli is critical to the understanding of growth regulation. Miscues in RTK signaling pathways can result in cellular transformation and ultimately in cancer. Two novel EGF receptor substrates designated EGF-receptor pathway substrates 8 and 15, or Eps8 and Eps15, have been described. Epsin is a 90 kDa binding partner to Eps15. Both epsin and Eps15 have an ubiquitous tissue distribution but are concentrated in presynaptic nerve terminals specialized for the Clathrin-mediated endocytosis of synaptic vesicles. Disruption of epsin function blocks Clathrin-mediated endocytosis. Epsin along with its binding partner Eps15 is proposed to be involved in the assistance of Clathrin coat rearrangement during Clathrin coated pit invagination. Epsin 2 and epsin 2a are also associated with Clathrin-mediated endocytosis and are enriched in the brain in the peri-Golgi region.

CHROMOSOMAL LOCATION

Genetic locus: EPN2 (human) mapping to 17p11.2; Epn2 (mouse) mapping to 11 B2.

SOURCE

epsin 2 (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of epsin 2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-31647 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

PROTOCOLS

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

APPLICATIONS

epsin 2 (S-20) is recommended for detection of epsin 2b and epsin 2a 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).

epsin 2 (S-20) is also recommended for detection of epsin 2b and epsin 2a in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for epsin 2 siRNA (h): sc-40511, epsin 2 siRNA (m): sc-40512, epsin 2 shRNA Plasmid (h): sc-40511-SH, epsin 2 shRNA Plasmid (m): sc-40512-SH, epsin 2 shRNA (h) Lentiviral Particles: sc-40511-V and epsin 2 shRNA (m) Lentiviral Particles: sc-40512-V.

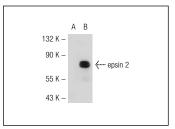
Molecular Weight of epsin 2: 65 kDa.

Positive Controls: SK-N-SH cell lysate: sc-2410 or IMR-32 cell lysate: sc-2409.

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



epsin 2 (S-20): sc-31647. Western blot analysis of epsin 2 expression in non-transfected: sc-117752 (**A**) and mouse epsin 2 transfected: sc-125306 (**B**) 293T whole cell lysates

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 **epsin 2 (F-10): sc-376788**, our highly recommended monoclonal alternative to epsin 2 (S-20).

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