endobrevin (G-12): sc-166820

BACKGROUND

Syntaxins were originally thought to be docking proteins, but have more recently been categorized as anchoring proteins that anchor themselves to the cytoplasmic surfaces of cellular membranes. Syntaxins bind to various proteins involved in exocytosis, including VAMPs (vesicle-associated membrane proteins), NSF (N-ethylmaleimide-sensitive factor), SNAPs (soluble NSF attachment proteins) and Synaptotagmin. Endobrevin, also designated VAMP-8 or ED, is a 100 amino acid single-pass type IV membrane protein that belongs to the synaptobrevin family. Similar in sequence to the synaptobrevins, endobrevin is abundantly expressed in kidney, moderately expressed in heart and spleen, and slightly expressed in brain, thymus and liver. Endobrevin interacts specifically with the SNAPs, most likely through an endobrevin-containing SNARE complex.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: VAMP8 (human) mapping to 2p11.2; Vamp8 (mouse) mapping to 6 C1.

SOURCE

endobrevin (G-12) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 25-50 near the N-terminus of endobrevin of human origin.

PRODUCT

Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

endobrevin (G-12) is available conjugated to agarose (sc-166820 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166820 HRP), 200 µg/ml, for WB, IHC(O) and ELISA; to either phycocerythrin (sc-166820 PE), fluorescein (sc-166820 FITC), Alexa Fluor® 488 (sc-166820 AF488), Alexa Fluor® 546 (sc-166820 AF546), Alexa Fluor® 594 (sc-166820 AF594) or Alexa Fluor® 647 (sc-166820 AF647), 200 µg/ml, for WB (RGB), IF, IHC(O) and FCM; and to either Alexa Fluor® 680 (sc-166820 AF680) or Alexa Fluor® 790 (sc-166820 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-166820 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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STORAGE

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

APPLICATIONS

endobrevin (G-12) is recommended for detection of endobrevin of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for endobrevin siRNA (h): sc-413000, endobrevin siRNA (m): sc-41301, endobrevin shRNA Plasmid (h): sc-413000-Sh, endobrevin shRNA Plasmid (m): sc-41301-SH, endobrevin shRNA (h) Lentiviral Particles: sc-41300-V and endobrevin shRNA (m) Lentiviral Particles: sc-41301-V.

Molecular Weight of endobrevin: 11 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, HEK293 whole cell lysate: sc-45136 or A-431 whole cell lysate: sc-2201.

DATA

endobrevin (G-12): sc-166820. Western blot analysis of endobrevin expression in HeLa (A), HEK293 (B), A-431 (C), U-937 (D) and HL-60 (E) whole cell lysates.

endobrevin (G-12): sc-166820. Immunofluorescence staining of formalin-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS


RESEARCH USE

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