

Synaptotagmin XV (G-12): sc-163411

BACKGROUND

Synaptotagmin XV (SytXV), also known as Synaptotagmin-15 (SYT15) or Chr10Syt, is a 421 amino acid single-pass type III membrane protein that belongs to the synaptotagmin family and contains 2 C2 domains. Both C2 domains are located on the C-terminal of Synaptotagmin XV and neither one mediates calcium-dependent or -independent phospholipid binding. Acting in non-neuronal tissues, Synaptotagmin XV may be involved in the trafficking and exocytosis of secretory vesicles. Synaptotagmin XV exists as four alternatively spliced isoforms that form homodimers. The gene that encodes Synaptotagmin XV contains 15,957 bases and maps to human chromosome 10q11.22. Making up nearly 4.5% of the human genome, chromosome 10 contains over 800 genes and 135 million nucleotides. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromic deafness, Wolman's syndrome, Cowden syndrome, Cockayne syndrome and porphyria.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SYT15 (human) mapping to 10q11.22; Syt15 (mouse) mapping to 14 B.

SOURCE

Synaptotagmin XV (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of Synaptotagmin XV of human origin.

STORAGE

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

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-163411 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Synaptotagmin XV (G-12) is recommended for detection of Synaptotagmin XV 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); not recommended for detection of Synaptotagmin XV isoform Syt XV-b.

Synaptotagmin XV (G-12) is also recommended for detection of Synaptotagmin XV in additional species, including equine and bovine.

Suitable for use as control antibody for Synaptotagmin XV siRNA (h): sc-90540, Synaptotagmin XV siRNA (m): sc-153981, Synaptotagmin XV shRNA Plasmid (h): sc-90540-SH, Synaptotagmin XV shRNA Plasmid (m): sc-153981-SH, Synaptotagmin XV shRNA (h) Lentiviral Particles: sc-90540-V and Synaptotagmin XV shRNA (m) Lentiviral Particles: sc-153981-V.

Molecular Weight of Synaptotagmin XV isoforms: 47/44/52/39 kDa.

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.

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.