

# Synaptotagmin XVII (P-14): sc-165632

## BACKGROUND

Synaptotagmin XVII (SytXVII), also known as Synaptotagmin-17 (SYT17) or Protein B/K, is a 474 amino acid peripheral membrane protein that belongs to the Synaptotagmin family and contains two C2 domains. While expressed abundantly in brain (frontal and temporal lobes, hippocampus, hypothalamus, amygdala, substantia nigra and pituitary), kidney and prostate, Synaptotagmin XVII is also expressed in fetal brain, kidney and lung. The gene that encodes Synaptotagmin XVII contains 100,082 bases and maps to human chromosome 16p12.3. Encoding over 900 genes and consisting of approximately 90 million base pairs, chromosome 16 makes up nearly 3% of the human genome and is associated with a variety of genetic disorders, such as giant axonal neuropathy, Rubinstein-Taybi syndrome and Crohn's disease. An association with systemic lupus erythematosus and a number of other autoimmune disorders with the pericentromeric region of chromosome 16 has led to the identification of SLC5A11 as a potential autoimmune modifier.

## REFERENCES

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- Chin, H., et al. 2006. Protein kinase A-dependent phosphorylation of B/K protein. *Exp. Mol. Med.* 38: 144-152.

## CHROMOSOMAL LOCATION

Genetic locus: SYT17 (human) mapping to 16p12.3; Syt17 (mouse) mapping to 7 F2.

## SOURCE

Synaptotagmin XVII (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Synaptotagmin XVII 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-165632 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Synaptotagmin XVII (P-14) is recommended for detection of Synaptotagmin XVII 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); non cross-reactive with other Synaptotagmin family members.

Suitable for use as control antibody for Synaptotagmin XVII siRNA (h): sc-93177, Synaptotagmin XVII siRNA (m): sc-153983, Synaptotagmin XVII shRNA Plasmid (h): sc-93177-SH, Synaptotagmin XVII shRNA Plasmid (m): sc-153983-SH, Synaptotagmin XVII shRNA (h) Lentiviral Particles: sc-93177-V and Synaptotagmin XVII shRNA (m) Lentiviral Particles: sc-153983-V.

Molecular Weight of Synaptotagmin XVII: 54 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](http://www.scbt.com) or our catalog for detailed protocols and support products.