

# E-Syt3 (V-12): sc-162803

## BACKGROUND

Synaptotagmins are a large gene family that function as regulators of both exocytosis and endocytosis and are involved in neurotransmitter secretion from small secretory vesicles. E-Syt1, E-Syt2 and E-Syt3 are Ca<sup>2+</sup>-regulated intrinsic membrane proteins that belong to the Extended Synaptotagmins (E-Syts) family. Primary structures and biochemical properties of the E-Syts family are highly conserved from yeast to human and consist of multiple C2 domains, which mediate lipid and calcium binding. Ubiquitously expressed with highest expression in brain, members of the E-Syts family form heteromeric complexes and are thought to play a role in the formation of junctions between endoplasmic reticulum and plasma membrane. E-Syt3 (extended synaptotagmin-like protein 3), also known as FAM62C or CHR3SYT, is a 886 amino acid protein that exists as two alternatively spliced isoforms. The gene encoding E-Syt3 is located on human chromosome 3q22.3.

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## CHROMOSOMAL LOCATION

Genetic locus: ESYT2 (human) mapping to 7q36.3; Esyt2 (mouse) mapping to 12 F2.

## SOURCE

E-Syt3 (V-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of E-Syt3 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-162803 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

E-Syt2 (V-12) is recommended for detection of E-Syt2 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 E-Syt1 or E-Syt3.

Suitable for use as control antibody for E-Syt2 siRNA (h): sc-89470, E-Syt2 siRNA (m): sc-145050, E-Syt2 shRNA Plasmid (h): sc-89470-SH, E-Syt2 shRNA Plasmid (m): sc-145050-SH, E-Syt2 shRNA (h) Lentiviral Particles: sc-89470-V and E-Syt2 shRNA (m) Lentiviral Particles: sc-145050-V.

Molecular Weight of E-Syt2: 102 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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.