

# Syntaphilin (H-250): sc-33824

## BACKGROUND

Syntaxins are categorized as proteins that anchor themselves to the cytoplasmic surfaces of cellular membranes. Syntaxins have been shown to bind to various proteins involved in exocytosis, including VAMPs (vesicle-associated membrane proteins), NSF (N-ethylmaleimide-sensitive factor), SNAP 25, SNAPs (soluble NSF attachment proteins) and Synaptotagmin. Syntaphilin competes with SNAP 25 for Syntaxin 1 binding. By absorbing free Syntaxin 1, Syntaphilin can inhibit the assembly of the SNARE complex, and thereby regulate Synaptic vesicle exocytosis.

## REFERENCES

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- Edelmann, L., et al. 1995. Synaptobrevin binding to Synaptophysin: a potential mechanism for controlling the exocytosis fusion machine. *EMBO J.* 14: 224-231.
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## CHROMOSOMAL LOCATION

Genetic locus: SNPH (human) mapping to 20p13; Snhp (mouse) mapping to 2 G3.

## SOURCE

Syntaphilin (H-250) is a rabbit polyclonal antibody raised against amino acids 221-470 mapping within an internal region of Syntaphilin of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

## APPLICATIONS

Syntaphilin (H-250) is recommended for detection of Syntaphilin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

Syntaphilin (H-250) is also recommended for detection of Syntaphilin in additional species, including bovine and porcine.

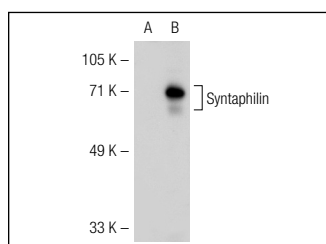
Suitable for use as control antibody for Syntaphilin siRNA (h): sc-41369, Syntaphilin siRNA (m): sc-41370, Syntaphilin siRNA (r): sc-270099, Syntaphilin shRNA Plasmid (h): sc-41369-SH, Syntaphilin shRNA Plasmid (m): sc-41370-SH, Syntaphilin shRNA Plasmid (r): sc-270099-SH, Syntaphilin shRNA (h) Lentiviral Particles: sc-41369-V, Syntaphilin shRNA (m) Lentiviral Particles: sc-41370-V and Syntaphilin shRNA (r) Lentiviral Particles: sc-270099-V.

Molecular Weight (predicted) of Syntaphilin isoforms: 54/58 kDa.

Molecular Weight (observed) of Syntaphilin: 70 kDa.

Positive Controls: T98G cell lysate: sc-2294, IMR-32 cell lysate: sc-2409 or TE671 cell lysate: sc-2416.

## DATA



Syntaphilin (H-250): sc-33824. Western blot analysis of Syntaphilin expression in non-transfected: sc-117752 (A) and human Syntaphilin transfected: sc-115433 (B) 293T whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

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Try **Syntaphilin (F-4): sc-365606**, our highly recommended monoclonal alternative to Syntaphilin (H-250).