ENDOPHILIN I (H-8): sc-374278

BACKGROUND
The endophilins comprise a family of three SH3 domain-containing proteins designated Endophilin I, II and III, or alternatively known as SH3P4, SH3P8 and SH3P13, respectively. These proteins associate with amphiphysin, synaptonemin and Dynamin and are implicated in presynaptic vesicle trafficking at nerve terminals. The expression patterns of the endophilins are consistent with their cellular functions at the neuronal synapse, as Endophilin I is expressed only in the brain. Both Endophilin II and Endophilin III are detected in a variety of tissues. Endophilin I is also implicated in modulating G protein-coupled receptor signaling by functioning as an adapter protein and directing β1 adrenergic receptors to the endocytic machinery.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: SH3GL2 (human) mapping to 9p22.2; Sh3gl2 (mouse) mapping to 9p22.2.

SOURCE
Endophilin I (H-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 267-303 near the C-terminus of Endophilin I of mouse 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.

Blocking peptide available for competition studies, sc-374278 P, (100 μg peptide in 0.5 ml PBS containing <0.1% sodium azide and 0.2% stabilizer protein).

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

APPLICATIONS
Endophilin I (H-8) is recommended for detection of Endophilin I 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).


Molecular Weight of Endophilin I: 40 kDa.


RECOMMENDED SUPPORT REAGENTS
To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG HRP: sc-516141 (dilution range: 1:50-1:200) with UltraCruz Blocking Reagent:
2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml)
3) Immunofluorescence: use m-IgG HRP: sc-516140 or m-IgG HRP: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Hard-set Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA
Endophilin I (H-8): sc-374278. Western blot analysis of Endophilin I expression in rat cerebellum (A) and human cerebral cortex (B) tissue extracts.
Endophilin I (H-8): sc-374278. Western blot analysis of Endophilin I expression in human brain (A) and rat brain (B) tissue extracts.

SELECT PRODUCT CITATIONS

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