

VILIP-1 (2F1-E3): sc-293209

BACKGROUND

The VSNL1 gene to the short arm of chromosome 2 encodes VILIP-1 (visinin-like protein 1). VILIP-1 contains four EF-hands and a double-stranded RNA-binding domain and is a member of the neuronal calcium sensor family, which is included in the calcium-binding protein superfamily. VILIP-1 is expressed in the membrane, cytoplasm and cytoskeleton of the sympathetic and parasympathetic neurons throughout the brain, except for the caudate-putamen region. The rate of VILIP-1 expression decreases significantly with age. VILIP-1 associates with Actin in the cytoskeleton, which may translocate VILIP-1 to the membrane. VILIP-1 binds the 3'-untranslated region of trkB double-stranded mRNA in a calcium dependent manner. VILIP-1 associates with G protein-receptor kinase 1 and inhibits its binding to the membrane. VILIP-1 is involved in membrane calcium signaling and may play a role in the sensitivity of G-protein cascades to cytosolic. Decreased amounts of VILIP-1 were found in Alzheimer disease brains, suggesting it may play a role in the disease.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: VSNL1 (human) mapping to 2p24.2; Vsnl1 (mouse) mapping to 12 A1.1.

SOURCE

VILIP-1 (2F1-E3) is a mouse monoclonal antibody raised against recombinant full length VILIP-1 of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

VILIP-1 (2F1-E3) is recommended for detection of VILIP-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for VILIP-1 siRNA (h): sc-106299, VILIP-1 siRNA (m): sc-155106, VILIP-1 shRNA Plasmid (h): sc-106299-SH, VILIP-1 shRNA Plasmid (m): sc-155106-SH, VILIP-1 shRNA (h) Lentiviral Particles: sc-106299-V and VILIP-1 shRNA (m) Lentiviral Particles: sc-155106-V.

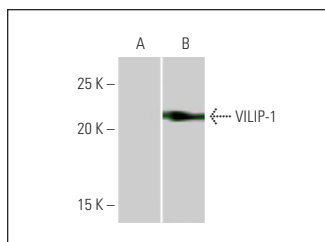
Molecular Weight of VILIP-1: 22 kDa.

Positive controls: VILIP-1 transfected 293T whole cell lysate.

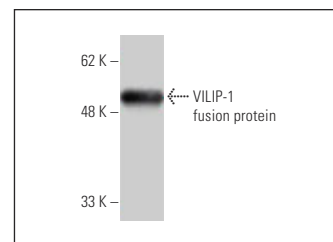
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



VILIP-1 (2F1-E3): sc-293209. Western blot analysis of VILIP-1 expression in non-transfected (A) and VILIP-1 transfected (B) 293T whole cell lysates.



VILIP-1 (2F1-E3): sc-293209. Western blot analysis of human recombinant VILIP-1 fusion protein.

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.