

VILIP-1/2/3 (H-72): sc-292292

BACKGROUND

The Visinin-like proteins, VILIP-1, VILIP-2 and VILIP-3, belong to a family of neuronal Ca²⁺ sensor (NCS) proteins conserved from yeast to human. Members of NCS family are mainly expressed in retinal photoreceptors, neuroendocrine cells or neurons and primarily function to regulate gene expression, modulate neurotransmitter release, direct regulation of ion channels, control cyclic nucleotide metabolism, biosynthesize polyphosphoinositides and participate in phototransduction. The NCS family is divided into five subfamilies, consisting of about 40 family members. VILIP-1 associates with actin in the cytoskeleton, which may translocate VILIP-1 to the membrane. VILIP-2 and VILIP-3 may be involved in Ca²⁺-dependent regulation of rhodopsin phosphorylation and may bind to two or three Ca²⁺ ions.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HPCAL4 (human) mapping to 1p34.2; Hpcal4 (mouse) mapping to 4 D2.2.

SOURCE

VILIP-1/2/3 (H-72) is a rabbit polyclonal antibody raised against amino acids 43-114 mapping within an internal region of VILIP-2 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.

APPLICATIONS

VILIP-1/2/3 (H-72) is recommended for detection of VILIP-1, VILIP-2 and VILIP-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

VILIP-1/2/3 (H-72) is also recommended for detection of VILIP-1, VILIP-2 and VILIP-3 in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of VILIP-1/2/3: 22 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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 or our catalog for detailed protocols and support products.


 MONOS
 Satisfaction
 Guaranteed

Try **VILIP-1 (2F1-E3): sc-293209**, our highly recommended monoclonal alternative to VILIP-1/2/3 (H-72).