



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

# VILIP-2 (h4): 293T Lysate: sc-176556

## BACKGROUND

The Visinin-like proteins, VILIP-1, VILIP-2 and VILIP-3, belong to a family of neuronal  $Ca^{2+}$  sensor (NCS) proteins conserved from yeast to human. The NCS family is divided into 5 subfamilies, consisting of about 40 family members in total. Group III represents the VILIP family and includes hippocalcin and neurocalcine- $\delta$ , along with VILIP-1-3. Visinin-like protein-2 (VILIP-2), also designated hippocalcin like-4 (HPCAL4), is a CaM-related  $Ca^{2+}$ -binding protein expressed in the neocortex and hippocampus. VILIP-2 is highly similar to human hippocalcin protein and hippocalcin like-1 protein as well as rat neural visinin-like  $Ca^{2+}$ -binding protein-type 1 and 2 proteins. VILIP-2 may be involved in the  $Ca^{2+}$ -dependent regulation of rhodopsin phosphorylation and may bind to two or three  $Ca^{2+}$  ions. The VILIP-2 protein contains four EF-hand domains. The gene which encodes for the VILIP-2 protein, HPCAL4, maps to chromosome 1p34.2 and the transcript of this gene has multiple polyadenylation sites.

## REFERENCES

1. Kobayashi, M., et al. 1999. Isolation of two human cDNAs, HLP3 and HLP4, homologous to the neuron-specific calcium-binding protein genes. *DNA Seq.* 9: 171-176.
2. Wiemann, S., et al. 2001. Toward a catalog of human genes and proteins: sequencing and analysis of 500 novel complete protein coding human cDNAs. *Genome Res.* 11: 422-435.
3. Lautermilch, N.J., et al. 2005. Modulation of CaV2.1 channels by the neuronal calcium-binding protein visinin-like protein-2. *J. Neurosci.* 25: 7062-7070.
4. Few, A.P., et al. 2005. Differential regulation of CaV2.1 channels by calcium-binding protein 1 and visinin-like protein-2 requires N-terminal myristoylation. *J. Neurosci.* 25: 7071-7080.

## CHROMOSOMAL LOCATION

Genetic locus: HPCAL4 (human) mapping to 1p34.2.

## PRODUCT

VILIP-2 (h4): 293T Lysate represents a lysate of human VILIP-2 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## STORAGE

Store at  $-20^{\circ}$  C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## APPLICATIONS

VILIP-2 (h4): 293T Lysate is suitable as a Western Blotting positive control for human reactive VILIP-2 antibodies. Recommended use: 10-20  $\mu$ l per lane.

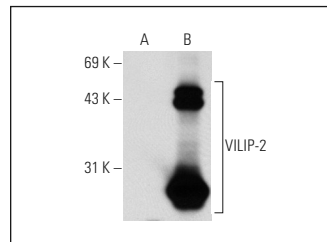
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

VILIP-2 (11B10): sc-135603 is recommended as a positive control antibody for Western Blot analysis of enhanced human VILIP-2 expression in VILIP-2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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.

## DATA



VILIP-2 (11B10): sc-135603. Western blot analysis of VILIP-2 expression in non-transfected: sc-117752 (A) and human VILIP-2 transfected: sc-176556 (B) 293T whole cell lysates.

## 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) for detailed protocols and support products.