

# **California Bioscience**

## **Product Datasheet**

Product Name	Visinin-Like Protein-1 Human Recombinant
Cata No	CB501459
Source	Escherichia Coli.
Synonyms	VISL1, VISL-1, VIS1, VIS-1, VILIP, HLP3, Hippocalcin-like protein 3, VSNL1, VILIP-1, VILIP1, HLP-3, HPCAL3, HUVISL1, Visinin-like protein 1.

#### Description

VSNL1 is a member of the visinin/recoverin subfamily of neuronal calcium sensor proteins. VILIP1 is strongly expressed in granule cells of the cerebellum where it associates with membranes in a calcium-dependent manner and modulates intracellular signaling pathways of the central nervous system by directly or indirectly regulating the activity of adenylyl cyclase. Changes in cellular expression of VSNL1 were found in hipppocampi of schizophrenics, since more interneurons showed immunoreactivity.

VILIP1 is expressed in pancreatic beta-cells. VILIP1 elevation enhances insulin secretion in cAMP-associated manner. Down-regulation of VILIP-1 decreased cAMP accumulation but increased insulin gene transcription. VILIP-1 interacts with cell membrane and actin-based cytoskeleton. VSNL1 modulates

cAMP-accumulation in C6 glioma cells. HLP3 modulates cGMP-accumulation in transfected neural cells and cerebellar granule neurons. Visinin-Like Protein-1 Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 201 amino acids and having a

Visinin-Like Protein-1 is fused to His tag at N-Terminus.

molecular mass of 23.4 kDa.

The protein's amino acid sequence corrssponds toUniProtKB/Swiss-Prot entry P62760.

Visinin-Like Protein-1 is purified by proprietary chromatographic techniques.

#### **Physical Appearance**

Sterile Filtered White lyophilized (freeze-dried) powder.

#### Purity

Greater than 95% as determined by SDS-PAGE.

#### Formulation

The sterile filtered concentrated (0.5mg/ml) protein solution was lyophilized with 20mM Tris & 20mM NaCl pH-7.5.

#### Reconstitution

Add sterile deionized water to a working concentration of 0.5mg/ml and let the lyophilized pellet dissolve completely.

#### Stability

Store lyophilized protein at -20°C. Aliquot the product after reconstitution to **avoid repeated freezing/ thawing cycles**. Reconstituted protein can be stored at 4°C for a limited period of time.

#### Sequence

MKHHHHHAS MGKQNSKLAP EVMEDLVKST EFNEHELKQW YKGFLKDCPS GRLNLEEFQQ LYVKFFPYGD ASKFAQHAFR TFDKNGDGTI DFREFICALS ITSRGSFEQK LNWAFNMYDL DGDGKITRVE MLEIIEAIYK MVGTVIMMKM NEDGLTPEQR VDKIFSKMDK NKDDQITLDE FKEAAKSDPS IVLLLQCDIQK

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