Mouse monoclonal antibody to Visinin-like protein 1 [2D11]: IgG

Catalogue No.:	M-1657-100
Description:	Visinin (sometimes known as hippocalcin-like protein 3, HLP3, HPCAL3, HUVISL1, VLP-1, VILIP and VILIP-1) was originally isolated biochemically from chicken retina as a major protein of about 24kDa on SDS-PAGE (1). Following cloning and sequencing of visinin, several visinin like proteins were discovered by homology screening (2, 3). One of these, Visinin-like protein 1 is a small Calcium binding protein which is very abundant in the nervous system and is found only in neurons, though different neurons have different levels of expression (4, 5). It is particularly concentrated in cerebellar Purkinje cells, and tends to be most abundant in perikarya and dendrites. The protein belongs to the large superfamly of calmodulin and paravalbumin type proteins which function by binding Calcium ions. Calcium binding alters the confomation of these proteins and allow them to interact with other binding partners, the properties of which they may alter. Visinin-like protein 1 has four "EF hand" domains, which are negatively charged helix-turn-helix peptides which are responsible for Calcium binding. Visinin-like protein 1 is 191 amino acids in size and has a molecular weight on SDS-PAGE of 22kDa. The protein has recently been suggested to be a useful biomarker of Alzheimer's disease and traumatic brain injury (6, 7, 8).
Unit size:	100 ug
Antigen:	Recombinant Visinin-like protein 1 expressed and purified from E. coli.
Antibody Type:	Monoclonal
Isotype:	IgG1
Clone:	2D11
Other Names:	Hippocalcin-like protein 3, HLP3, HPCAL3, HUVISL1, VLP-1, VILIP and VILIP-1
Produced in:	Mouse
Applications:	Western Blotting (WB), Immunocytochemistry (ICC) and Immunohistochemistry (IHC). A dilution of 1:500 - 1:1,000 is recommended for WB. A dilution of 1:500-1:1,000 is recommended for IHC and ICC. Biosensis recommends optimal dilutions/concentrations should be determined by the end user.
Specificity:	The antibody reacts with a 22 kDa band by Western blot on bovine cerebellum lysate. It has also been used successfully for immunocytochemistry.
Species Against:	Human, bovine, rat and mouse. It is expected that it will work on other mammal tissues.
Antibody Against:	Visinin-like protein 1
Form:	Lyophilised from PBS. Contains 5% trehalose.
Appearance:	White powder
Reconstitution:	Reconstitute in sterile distilled water. Centrifuge to remove any insoluble material.
Storage:	After reconstitution of lyophilised antibody, aliquot and store at -20C for a higher stability. Avoid freeze-thaw cycles.
Expiry Date:	

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12 months after purchase

General References:

1. Hatakenaka S, Kuo CH, Miki N. Analysis of a distinctive protein in chick retina during development. Brain Res. 312:155-63 (1983).

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Western blot of bovine cerebellum homogenate stained with M-1657-100.

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