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ProductInformation

Anti-Vesicle-Associated Membrane Protein 3
Developed in Rabbit,
Affinity Isolated Antibody

Product Number **V 1639**

Product Description

Anti-Vesicle-Associated Membrane Protein 3 (cellubrevin/VAMP-3) is developed in rabbit using a highly purified peptide MSTGVPSGSSAATGSNRR(C), corresponding to amino acid residues 1-18 of mouse VAMP-2 with additional C-terminal cysteine as the immunogen. The antibody was affinity isolated on immobilized immunogen.

Anti-Vesicle-Associated Membrane Protein 3 specifically recognizes VAMP-3 (13 kDa) and may be used for the detection of VAMP-3 protein from rat, dog, mouse and human by immunoblotting.

The phenomenon of intracellular protein transport, specifically vesicle docking and vesicle fusion, involves distinct processes mediated by distinct proteins.[1,2] Because the general membrane fusion events are catalyzed non-specifically, targeting of transport vesicles to specific acceptor membranes is thought to be determined prior to the vesicle docking and fusion process. The SNARE hypothesis argues that specific interactions between vesicle-associated membrane proteins (VAMPs), SNAP-25 and syntaxins form a SNAP receptor or SNARE complex that determines the destination membrane of the transport vesicle.[3] Once at the appropriate acceptor membrane, SNAP and NSF bind to the SNARE complex and facilitate membrane fusion.

The VAMP subfamily has seven members.[4] They are considered R-type SNAREs and they are localized to various post-Golgi compartments like: synaptic vesicles and secretory granules (VAMP-1 and –2),[5,6] sorting and recycling endosomes (VAMP-3/cellubrevin),[6] the trans-Golgi network (VAMP-4),[7] differentiated myotubes (VAMP-5),[8] and lysosomes (VAMP-7).[6]

Reagent

Anti-Vesicle-Associated Membrane Protein 3 is supplied as 100 µg of affinity isolated antibody at 1 mg/ml in phosphate buffered saline containing 1 mg/ml bovine serum albumin and 0.05 % sodium azide.

Precautions and Disclaimer

Due to the sodium azide content, a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazardous and safe handling practices.

Storage/Stability

Store at –20 °C. For extended storage, freeze at –20 °C in working aliquots. Repeated freezing and thawing is not recommended. Storage in “frost-free” freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

The recommended working dilution is 2.0 µg/ml for immunoblotting using peroxidase conjugated goat anti-rabbit IgG and chemiluminescent detection.

Note: In order to obtain best results and assay sensitivities of different techniques and preparations, we recommend determining optimal working dilutions by titration test.

References

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