

DESCRIPTION

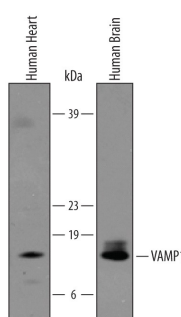
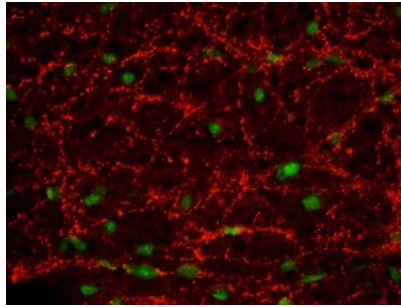
Species Reactivity	Human/Mouse
Specificity	Detects human and mouse VAMP-1 in direct ELISAs and Western blots. In direct ELISAs, approximately 20% cross-reactivity with recombinant human (rh) VAMP-2 and less than 1% cross-reactivity with rhVAMP-5 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human VAMP-1 Met1-Lys96 Accession # P23763
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human/Mouse VAMP-1 by Western Blot. Western blot shows lysates of human heart and brain tissue. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human/Mouse VAMP-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4828) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for VAMP-1 at approximately 17 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.</p>	<p>Immunohistochemistry</p>  <p>VAMP-1 in Mouse Spinal Cord. VAMP-1 was detected in perfusion fixed frozen sections of mouse spinal cord using 1.7 µg/mL Goat Anti-Human/Mouse VAMP-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4828) overnight at 4 °C. Tissue was stained with the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained (green). View our protocol for Fluorescent IHC Staining of Frozen Tissue Sections.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

VAMP-1 (vesicle-associated membrane protein 1; also synaptobrevin-1/SYB1) is an 18 kDa member of the synaptobrevin family of proteins. It is expressed in neurons, neutrophils, and skeletal muscle cells, and participates in vesicle fusion with the plasma membrane. Human VAMP-1 is 118 amino acids (aa) in length. It is a type IV transmembrane protein that contains an N-terminal cytoplasmic region (aa 1-96) and a 22 aa transmembrane domain (aa 97-118). There is one coiled-coil region between aa 33-93. Multiple splice variants are known that show two, three, four and 81 aa substitutions for the C-terminal five amino acids. One three aa variant creates a mitochondrial targeting motif. Over aa 1-96, human VAMP-1 is 98% aa identical to mouse VAMP-1.