

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human APLP-1 in Western blots. In Western blots, approximately 15% cross-reactivity with recombinant mouse APLP-1 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human APLP-1 Gln34-Glu580 Accession # P51693
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.

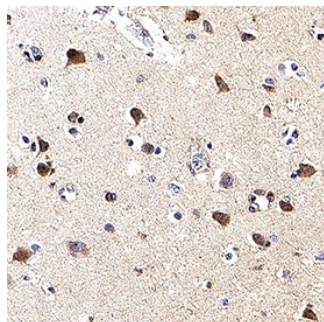
APPLICATIONS

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	0.1 µg/mL	Recombinant Human APLP-1
Immunohistochemistry	0.3-15 µg/mL	Immersion fixed paraffin-embedded sections of human brain (cortex)
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human APLP-1, see our available Western blot detection antibodies
Simple Western	25 µg/mL	Human brain (hippocampus) and mouse brain (hippocampus)

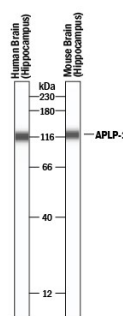
DATA

Immunohistochemistry



APLP-1 in Human Brain. APLP-1 was detected in immersion fixed paraffin-embedded sections of human brain (cortex) using Goat Anti-Human APLP-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3129) at 0.3 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Goat IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC004). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in neurons. Staining was performed using our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.

Simple Western



Detection of Human APLP-1 by Simple Western™. Simple Western lane view shows lysates of human brain (hippocampus) and mouse brain (hippocampus), loaded at 0.2 mg/mL. A specific band was detected for APLP-1 at approximately 119 kDa (as indicated) using 25 µg/mL of Goat Anti-Human APLP-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3129). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



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

APLP-1 is a transmembrane metalloprotein that is expressed in central neurons. Similar to APP and APLP-2, APLP-1 is susceptible to cleavage by various secretases, generating multiple fragments from the extracellular and intracellular domains. These include peptides similar to the amyloidogenic Aβ peptides and a cytoplasmic fragment that associates with Fe65 family proteins and functions as a transcriptional activator. The extracellular domain contains heparin and collagen binding regions and is 89% identical between human and mouse.