

# **Human APLP-2 Antibody**

Monoclonal Mouse IgG<sub>2B</sub> Clone # 397702 Catalog Number: MAB49451

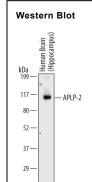
DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects human APLP-2 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant mouse APLP-2 or recombinant human APLP-1 is observed.		
Source	Monoclonal Mouse IgG <sub>2B</sub> Clone # 397702		
Purification	Protein A or G purified from hybridoma culture supernatant		
Immunogen	Mouse myeloma cell line NS0-derived recombinant human APLP-2 Leu30-Ser680 Accession # Q06481		
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	2 μg/mL	See Below

# DATA



Detection of Human APLP-2 by Western Blot. Western blot shows lysates of human brain (Alzheimer's disease hippocampus) tissue. PVDF Membrane was probed with 2 µg/mL of Human APLP-2 Monoclonal Antibody (Catalog # MAB49451) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for APLP-2 at approximately 150 kDa (as indicated). This experiment was conducted under non-reducing conditions and using Immunoblot Buffer Group 1.

## PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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	orage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.		
	<ul> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> </ul>		

- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

### BACKGROUND

Amyloid beta precursor-like protein 2 (APLP-2) is a 120-170 kDa member of the APP family of neuronal type I transmembrane proteins. Its extracellular domain consists of an N-terminal Cys-rich domain, an Asp/Glu-rich acidic region, a Kunitz protease inhibitor (KPI) domain, and a GAG attachment site in the membrane proximal domain. APLP-2 forms both homodimers and heterodimers with APP and APLP-1. Proteolytic cleavage of APLP-2 generates peptides similar to the amyloidogenic Aβ peptides and a cytoplasmic fragment that functions as a transcriptional coactivator. Alternate splicing of APLP-2 generates isoforms that lack the KPI domain or contain an insertion that prevents GAG attachment. The extracellular domain of human APLP-2 shares 81% and 93% aa sequence identity with mouse and rat APLP-2, respectively.

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