

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human APLP-2 in direct ELISAs and Western blots. In direct ELISAs, approximately 30% cross-reactivity with recombinant mouse (rm) APLP-2 is observed and less than 1% cross-reactivity with recombinant human APLP-1 and rmAPLP-1 is observed.                      |
| <b>Source</b>             | Polyclonal Goat IgG                                                                                                                                                                                                                                                         |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant human APLP-2<br>Leu37-Ser680<br>Accession # AAH00373                                                                                                                                                                        |
| <b>Conjugate</b>          | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## 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.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

## BACKGROUND

APLP-2 is a 100-170 kDa glycoprotein, 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% amino acid sequence identity with mouse and rat APLP-2, respectively.

## PRODUCT SPECIFIC NOTICES

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