# APLP-1 Protein, Mouse (HEK293, His)

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| **Cat. No.:** | HY-P75582 |
| **Synonyms:** | Amyloid beta precursor like protein 1; Amyloid-like protein 1; APLP-1; C30 |
| **Species:** | Mouse |
| **Source:** | HEK293 |
| **Accession:** | Q03157 (M1-E584) |
| **Gene ID:** | 11803 |
| **Molecular Weight:** | Approximately 62.4 kDa |

## PROPERTIES

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| **Appearance** | Lyophilized powder. |
| **Formulation** | Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. |
| **Endotoxin Level** | <1 EU/μg, determined by LAL method. |
| **Reconsititution** | It is not recommended to reconstitute to a concentration less than 100 μg/mL in $ddH_2O$. |
| **Storage & Stability** | Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage. |
| **Shipping** | Room temperature in continental US; may vary elsewhere. |

## DESCRIPTION

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| **Background** | The APLP-1 protein may have a role in postsynaptic function, suggesting its involvement in the intricate processes occurring at the synaptic sites. The C-terminal fragment resulting from gamma-secretase processing, ALID1, exhibits the ability to activate transcription through binding to APBB1 (Fe65). APLP-1 is also implicated in JIP signal transduction by interacting with the C-terminal region. Moreover, it appears to engage with cellular G-protein signaling pathways, indicating its potential influence on diverse cellular signaling mechanisms. Additionally, APLP-1 can regulate neurite outgrowth by binding to extracellular matrix components such as heparin and collagen I. However, the gamma-CTF peptide, C30, derived from APLP-1, is noteworthy for its potent enhancement of neuronal apoptosis, underscoring the dual nature of APLP-1's functional effects in cellular processes. Further exploration into the specific mechanisms underlying these diverse roles could provide valuable insights into the multifaceted functions of APLP-1 in neural development and homeostasis. |



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