

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human LYPD1 in direct ELISAs. In direct ELISAs, less than 1% cross-reactivity with recombinant human LYPD3 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human LYPD1 Cys54-Ser116 Accession # Q8N2G4
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.

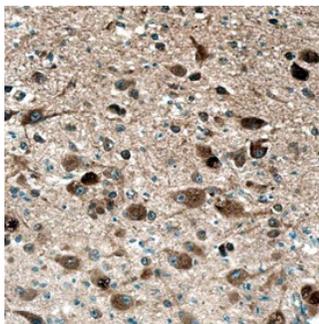
APPLICATIONS

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
Immunohistochemistry	5-15 µg/mL	See Below

DATA

Immunohistochemistry



LYPD1 in Human Brain. LYPD1 was detected in immersion fixed paraffin-embedded sections of human brain (hypothalamus) using Sheep Anti-Human LYPD1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6855) at 10 µg/mL overnight at 4 °C. 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 the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to neuronal cell bodies and processes. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
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

LYPD1 (Ly6/PLAUR-domain containing protein 1; also Lynx2 and PHTS) is a 15-20 kDa member of the Ly6 family of GPI-anchored proteins. It is expressed on postmitotic neurons in multiple locations, performing multiple functions. Two suggested functions include the ability to 1) block cell proliferation, and 2) bind to acetylcholine receptors, promoting their desensitization. Human LYPD1 preproprecursor is 141 amino acids (aa) in length. It contains a signal sequence (aa 1-20), a 97 aa mature region (aa 21-117), and a cleavable prodomain that, when cleaved, generates a GPI-linked form (aa 118-141). The mature molecule contains one Ly6 domain (aa 25-107). There are multiple potential isoform variants. One possesses an alternative start site at Met53, a second contains a 21 aa substitution for aa 1-5, a third shows a 21 aa substitution for aa 64-141, and a fourth possesses a 29 aa substitution for aa 65-141. Over aa 54-116, human and mouse LYPD1 are identical in aa sequence.