

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human Syntaxin 12 in direct ELISAs. Detects human and mouse Syntaxin 12 in immunohistochemistry.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Syntaxin 12 Met1-Gln200 Accession # Q86Y82
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.

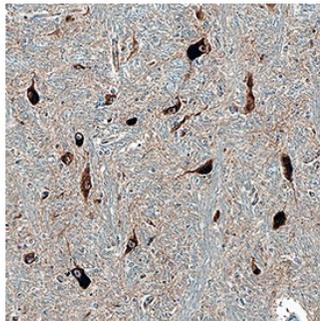
APPLICATIONS

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	1-15 µg/mL	See Below

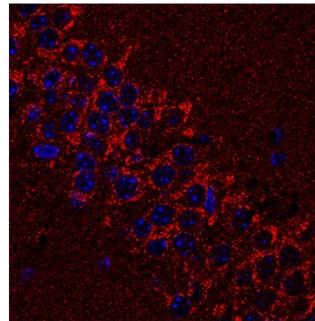
DATA

Immunohistochemistry



Syntaxin 12 in Human Brain. Syntaxin 12 was detected in immersion fixed paraffin-embedded sections of human brain using Goat Anti-Human/Mouse Syntaxin 12 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6617) at 1 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. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

Immunohistochemistry



Syntaxin 12 in Mouse Brain. Syntaxin 12 was detected in perfusion fixed frozen sections of mouse brain (hippocampus) using Goat Anti-Human/Mouse Syntaxin 12 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6617) at 15 µg/mL overnight at 4 °C. Tissue was stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm in neurons and synaptic vesicles. View our protocol for [Fluorescent IHC Staining of Frozen Tissue Sections](#).

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	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

Syntaxin 12/STX12 is a 39 kDa member of the Syntaxin family. It is a SNARE that acts to regulate protein transport between late endosomes and the trans-Golgi network. Human STX12 is 276 amino acids (aa) in length, and is a type IV single-pass transmembrane protein. The cytoplasmic region extends from aa 1-248. A coiled-coil region extends from aa 33-131 within that region. From aa 178-240, there is a t-SNARE coiled-coil homology domain. The transmembrane region is located at 249-269, and a vesicular area is located at aa 270-276. Human STX12 shares 92% aa sequence identity with mouse STX12.