

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Syntaxin 6 in direct ELISAs and Western blots. In direct ELISAs, less than 3% cross-reactivity with recombinant human (rh) Syntaxin 8, rhSyntaxin 12, and rhSyntaxin 16 is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Syntaxin 6 Ser69-Asn217 Accession # O43752
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

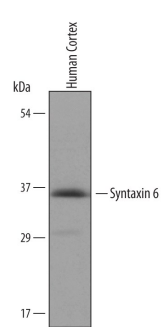
## APPLICATIONS

**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
<b>Western Blot</b>	1 µg/mL	See Below
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below

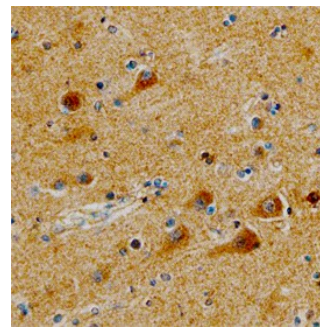
## DATA

### Western Blot



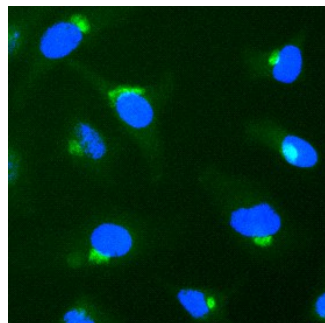
**Detection of Human Syntaxin 6 by Western Blot.** Western blot shows lysates of human cortex tissue. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human Syntaxin 6 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5664) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Syntaxin 6 at approximately 35 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

### Immunohistochemistry



**Syntaxin 6 in Human Brain.** Syntaxin 6 was detected in immersion fixed paraffin-embedded sections of human brain (cortex) using Sheep Anti-Human Syntaxin 6 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5664) at 5 µg/mL overnight at 4 °C. 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 the cytoplasm of neurons. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

### Immunocytochemistry



**Syntaxin 6 in HeLa Human Cell Line.** Syntaxin 6 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Sheep Anti-Human Syntaxin 6 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5664) at 1.7 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 493-conjugated Anti-Sheep IgG Secondary Antibody (green; Catalog # NL012) and counterstained with DAPI (blue). Specific staining was localized to Golgi vesicles. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Syntaxin 6 (STX6) is a 30-35 kDa member of the syntaxin family of proteins. It is widely expressed, embedded in trans-Golgi and endosomal membranes, and is associated with a variety of SNARE proteins. STX6 is involved in the regulation of caveolae-dependent endocytosis, and is crucial for membrane remodeling.

Human STX6 is a type IV single-pass transmembrane protein (very long cytoplasmic N-terminus) that is 255 amino acids (aa) in length. It contains a coiled-coil region (aa 41-74), a t-SNARE domain (aa 163-225) that is likely involved in protein-protein interactions, and a C-terminal transmembrane sequence. There are two splice variants that are also 255 aa in length, but show variation over aa 69-73. Over aa 69-217, human STX6 shares 93% aa identity with mouse STX6.