

DESCRIPTION

Species Reactivity	Human/Rat
Specificity	Detects human Syntaxin 5 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) Syntaxin 7, rhSyntaxin 8, and rhSyntaxin 12 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Syntaxin 5 isoform 2 Met55-Thr300 Accession # Q13190
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 as a 0.2 µm filtered solution in PBS.

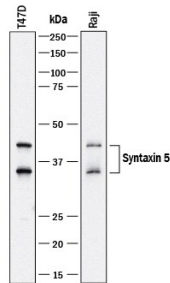
APPLICATIONS

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
Western Blot	0.5 µg/mL	See Below
Immunocytochemistry	1-15 µg/mL	See Below
Immunohistochemistry	3-15 µg/mL	See Below
Simple Western	25 µg/mL	See Below

DATA

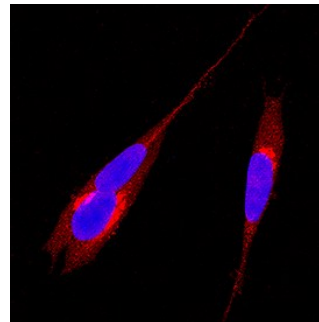
Western Blot



Detection of Human Syntaxin 5 by

Western Blot. Western blot shows lysates of T47D human breast cancer cell line and Raji human Burkitt's lymphoma cell line. PVDF membrane was probed with 0.5 µg/mL of Goat Anti-Human/Rat Syntaxin 5 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5687) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). Specific bands were detected for Syntaxin 5 at approximately 35 and 42 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

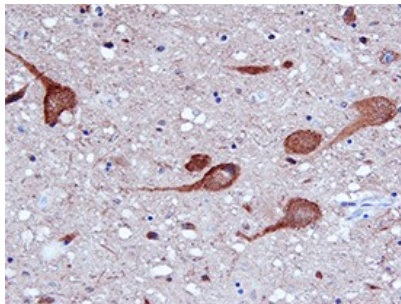
Immunocytochemistry



Syntaxin 5 in SH-SY5Y Human Cell Line.

Syntaxin 5 was detected in immersion fixed SH-SY5Y human neuroblastoma cell line using Goat Anti-Human/Rat Syntaxin 5 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5687) at 1.7 µg/mL for 3 hours at room temperature. Cells were 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. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

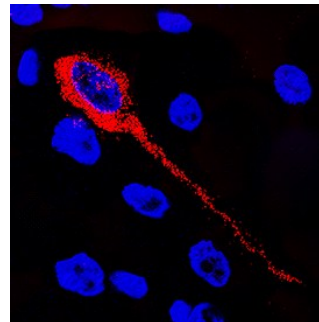
Immunohistochemistry



Syntaxin 5 in Human Brain.

Syntaxin 5 was detected in immersion fixed paraffin-embedded sections of human brain (substantia nigra) using Goat Anti-Human/Rat Syntaxin 5 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5687) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in neurons. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

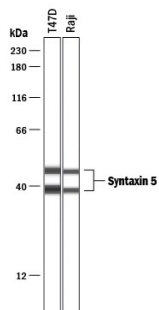
Immunohistochemistry



Syntaxin 5 in Rat Brain.

Syntaxin 5 was detected in immersion fixed frozen sections of rat brain using Goat Anti-Human/Rat Syntaxin 5 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5687) at 3 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 neuronal cytoplasm. View our protocol for [Fluorescent IHC Staining of Frozen Tissue Sections](#).

Simple Western



Detection of Human Syntaxin 5 by Simple Western™. Simple Western lane view shows lysates of T47D human breast cancer cell line and Raji human Burkitt's lymphoma cell line, loaded at 0.2 mg/mL. Specific bands were detected for Syntaxin 5 at approximately 39 and 47 kDa (as indicated) using 25 µg/mL of Goat Anti-Human/Rat Syntaxin 5 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5687) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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 5 (STX5) is a predicted 41-42 kDa member of the syntaxin family of proteins. It is a t-SNARE that is widely expressed (but not in striated muscle), and embedded in either the *cis*-Golgi network (a 37 kDa form) or the ER (the 46 kDa form). STX5 is involved in the regeneration and maintenance of the Golgi apparatus after mitosis. Human STX5 is a type IV single-pass transmembrane protein (very long cytoplasmic N-terminus) that is 355 amino acids (aa) in length. It contains an ER retrieval signal (Arg4Lys5Arg6), a t-SNARE domain (aa 263-325) with a coiled-coil region (aa 287-318), and a C-terminal transmembrane sequence. The 35 kDa short form exhibits an alternate start site at Met55. Two other potential splice variants show either the Met55, or a Met97 start site coupled to a 19 aa substitution for aa 303-355. Over aa 55-300, human STX5 shares 94% aa identity with mouse STX5.