

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human Draxin in direct ELISAs and Western blots. In direct ELISAs, approximately 20% cross-reactivity with recombinant mouse Draxin is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Draxin aa 26-349 Accession # Q8NBI3
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.

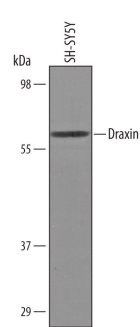
APPLICATIONS

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	1 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

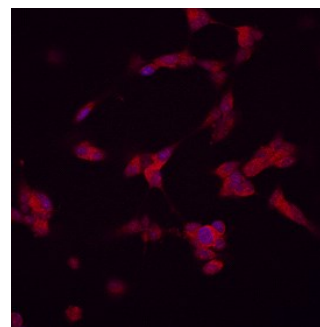
DATA

Western Blot



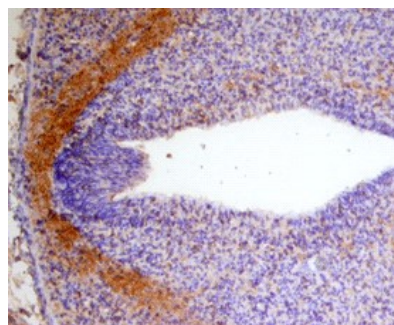
Detection of Human Draxin by Western Blot. Western blot shows lysates of SH-SY5Y human neuroblastoma cell line. PVDF Membrane was probed with 1 µg/mL of Sheep Anti-Human Draxin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6148) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Draxin at approximately 58 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



Draxin in SH-SY5Y Human Cell Line. Draxin was detected in immersion fixed SH-SY5Y human neuroblastoma cell line using Sheep Anti-Human Draxin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6148) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunohistochemistry



Draxin in Mouse Embryo. Draxin was detected in immersion fixed frozen sections of mouse embryo (E13.5) using Sheep Anti-Human Draxin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6148) at 15 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 diencephalon. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

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	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

Draxin (Dorsal repulsive axon guidance protein; also neucrin) is a secreted, 58 kDa, presumable glycoprotein member of the draxin family of molecules. In mammals, it is expressed in neurons (axons), astroglia, and likely cells of the developing somite. Draxin acts as a Wnt antagonist, apparently by binding to LRP6. The net effect is to block neural crest migration, and the organization of axons into functional tracts or bundles (fasciculation). Mature human Draxin is 324 amino acids (aa) in length. It contains one potential N-linked glycosylation site, followed by a Cys-rich domain (aa 274-333). Mature human Draxin (aa 26-349) shares 79% aa identity with mature mouse Draxin.