Human/Mouse/Rat Complexin-2 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF5085

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects endogenous human, mouse and rat Complexin-2 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human Complexin-2 Met1-Lys134 Accession # Q6PUV4
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.

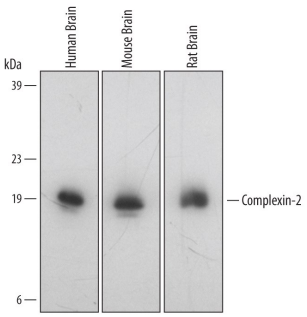
APPLICATIONS

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

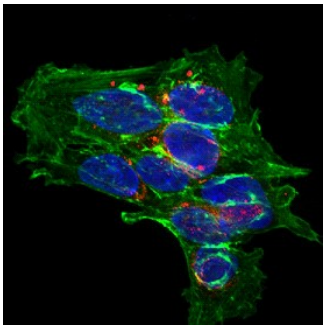
DATA

Western Blot



Detection of Human/Mouse/Rat Complexin-2 by Western Blot. Western blot shows lysates of mouse, human, and rat brain tissue. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human/Mouse/Rat Complexin-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5085) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for Complexin-2 at approximately 19 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.

Immunocytochemistry



Complexin-2 in SH-SY5Y Human Neuroblastoma Cells. SH-SY5Y human neuroblastoma cells were cultured overnight in the presence of 1 mM Retinoic Acid (Catalog # 0695/50) prior to immersion fixation. Complexin-2 was detected using a Goat Anti-Human/Mouse/Rat Complexin-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5085). The cells were stained with the NorthernLights 557-conjugated Donkey Anti-Goat IgG Affinity-purified Secondary Antibody (red; Catalog # NL001). Actin filaments were stained with FITC-conjugated Phalloidin (green) and the nuclei were counterstained with DAPI (blue). Complexin-2 immunoreactivity was localized to synaptic vesicles. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

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.** ● 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

Complexin-2 (CPX II; also known as synaphin-1) is a 19 kDa, cytosolic protein that belongs to the complexin/synaphin family of molecules. It is expressed in excitatory neurons and serves as a block against premature granule release by its binding to the *cis*-SNARE complex that contains SNAP25, VAMP2 and STX1A. Human Complexin-2 is 134 amino acids (aa) in length and contains one coiled-coil domain (aa 28-84) that incorporates part of a SNARE complex interaction sequence (aa 41-97). There is one potential splice variant that shows a premature truncation after Glu114. Human Complexin-2 is identical in aa sequence to that for mouse and rat Complexin-2.

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