**BACKGROUND**

Members of the Complexin protein family promote SNARE (soluble N-ethylmaleimide-sensitive factor attachment protein receptors) precomplex formation by binding to Syntaxin via an α-helical domain. Complexins are important regulators of transmitter release at a late step in calcium-dependent neurotransmitter release or immediately after the calcium-triggering step of fast synchronous transmitter release. Neurons lacking Complexins show reduced transmitter release efficacy due to decreased calcium sensitivity of the synaptic secretion process. Complexin-3, also known as CPXII, CPX-III, Nba111S89 or CPLX3, is a 158 amino acid member of the Complexin/synaplin family. Complexin-3 is involved in the regulation of synaptic vesicle exocytosis. Complexin-3 binds to the SNARE core complex containing SNAP 25, VAMP-2 and Syntaxin 1.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: CPLX3 (human) mapping to 15q24.1; Cplx3 (mouse) mapping to 9 B.

**SOURCE**

Complexin-3 (C-8) is a mouse monoclonal antibody raised against amino acids 1-44 mapping at the N-terminus of Complexin-3 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG κκ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Complexin-3 (C-8) is available conjugated to agarose (sc-365941 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365941 HRP), 200 µg/ml, for WB, IHC and ELISA; to ether phycerythrin (sc-365941 PE), fluorescein (sc-365941 FITC), Alexa Fluor® 488 (sc-365941 AF488), Alexa Fluor® 546 (sc-365941 AF546), Alexa Fluor® 594 (sc-365941 AF594) or Alexa Fluor® 647 (sc-365941 AF647), 200 µg/ml, for WB (RGB), IF, IHC and FCM; and to either Alexa Fluor® 680 (sc-365941 AF680) or Alexa Fluor® 790 (sc-365941 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM. Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

**APPLICATIONS**

Complexin-3 (C-8) is recommended for detection of Complexin-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein [1 ml of cell lysate]), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Positive Controls: mouse brain extract: sc-2253, mouse spleen extract: sc-2391 or human brain tissue extract.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG BP-HRP: sc-516102 or m-IgG BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (dilution range 1:100-1:1000). 3) Immunofluorescence: use m-IgG BP-FITC: sc-516140 or m-IgG BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistochemical Mount: sc-45086, or Organo/Limonene Mount: sc-45087.

**DATA**


Complexin-3 (C-8): sc-365941. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human prostate tissue showing cytoplasmic staining of glandular cells.

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.