

Store at
-20°C

#17700

Complexin-1 (D5Q5H) Rabbit mAb

Cell Signaling
TECHNOLOGY®Support: +1-978-867-2388 (U.S.)
www.cellsignal.com/supportOrders: 877-616-2355 (U.S.)
orders@cellsignal.comEntrez-Gene ID #10815
UniProt ID #O14810

New 06/16

For Research Use Only. Not For Use In Diagnostic Procedures.

Applications
W, IP, IF-IC
EndogenousSpecies Cross-Reactivity*
H, M, RMolecular Wt.
14 kDaIsotype
Rabbit IgG**

Background: Complexins are small soluble proteins composed of a central α -helical-structured domain surrounded by amino- and carboxy-terminal unstructured domains (1). These cytosolic proteins bind to t-SNAREs with low affinity and to assembled SNARE complexes with high affinity (1,2). Two isoforms, complexin-1 and complexin-2, are expressed in neuronal cells (3) where they regulate evoked and spontaneous exocytosis (4,5). Altered complexin expression resulting from RNAi-mediated knockdown (6) or gene invalidation (7) leads to alteration in spontaneous fusion events and neurotransmitter release, which reflects functions at both inhibitory and stimulatory synapses.

Specificity/Sensitivity: Complexin-1 (D5Q5H) Rabbit mAb recognizes endogenous levels of total Complexin-1 protein. This antibody does not cross-react with Complexin-2.

Source/Purification: Monoclonal antibody is produced by immunizing animals with recombinant protein specific to human Complexin-1 protein.

Background References:

- (1) Chen, X. et al. (2002) *Neuron* 33, 397-409.
- (2) McMahon, H.T. et al. (1995) *Cell* 83, 111-9.
- (3) Reim, K. et al. (2005) *J Cell Biol* 169, 669-80.
- (4) Reim, K. et al. (2001) *Cell* 104, 71-81.
- (5) Huntwork, S. and Littleton, J.T. (2007) *Nat Neurosci* 10, 1235-7.
- (6) Maximov, A. et al. (2009) *Science* 323, 516-21.
- (7) Xue, M. et al. (2008) *Proc Natl Acad Sci U S A* 105, 7875-80.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C . Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

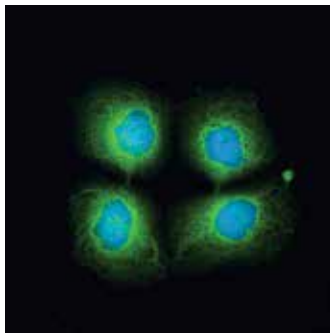
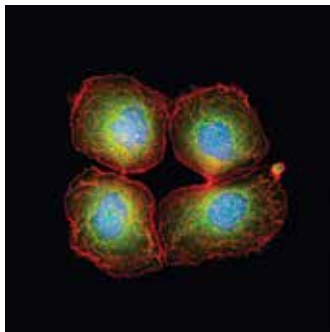
**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

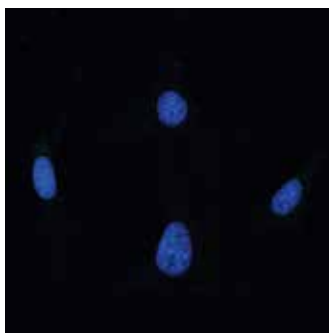
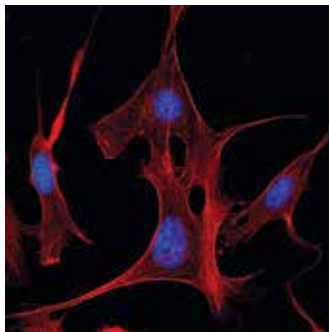
Western blotting	1:1000
Immunoprecipitation	1:50
Immunofluorescence (IF-IC)	1:50

For product specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com

Neuro-2a



NIH/3T3



◀ Confocal immunofluorescent analysis of Neuro-2a (positive, left panels) and NIH/3T3 (negative, right panels) using Complexin-1 (D5Q5H) Rabbit mAb (green). Actin filaments were labeled with DyLight™ 554 Phalloidin #13054 (red, upper panels). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).

DRAQ5® is a registered trademark of Biostatus Limited.

DyLight is a trademark of Thermo Fisher Scientific Inc. and its subsidiaries.

Tween is a registered trademark of ICI Americas, Inc.

Thank you for your recent purchase. If you would like to provide a review visit cellsignal.com/comments.

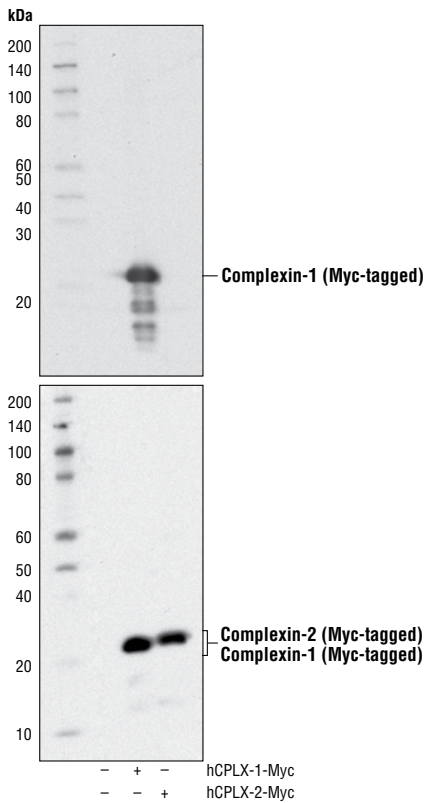
www.cellsignal.com

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.

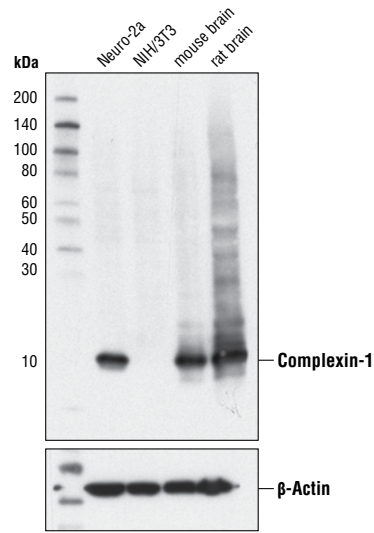
© 2016 Cell Signaling Technology, Inc.

XP and Cell Signaling Technology are trademarks of Cell Signaling Technology, Inc.

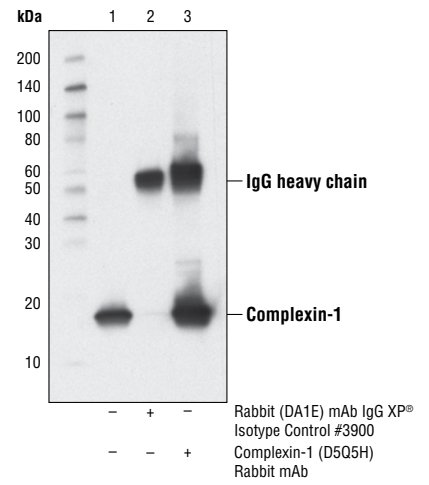
Applications: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide Species Cross-Reactivity: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.



Western blot analysis of extracts from 293T cells, mock transfected (-) or transfected with a construct expressing Myc-tagged full length human complexin-1 (hCPLX-1-Myc; +) or complexin-2 (hCPLX-2-Myc; +), using Complexin-1 (D5Q5H) Rabbit mAb (upper), and Myc-Tag (71D10) Rabbit mAb #2278 (lower).



Western blot analysis of extracts from various cells lines and tissues using Complexin-1 (D5Q5H) Rabbit mAb (upper) or β -Actin (D6A8) Rabbit mAb #8457 (lower).



Immunoprecipitation of Complexin-1 from Neuro-2a cell extracts. Lane 1 is 10% input, lane 2 is Rabbit (DA1E) mAb IgG XP[®] Isotype Control #3900 and lane 3 is Complexin-1 (D5Q5H) Rabbit mAb. Western blot was performed using Complexin-1 (D5Q5H) Rabbit mAb.

Thank you for your recent purchase. If you would like to provide a review visit cellsignal.com/comments.

www.cellsignal.com