

Store at  
-20C  
#28070**Complexin-1/2 (D8A6E) Rabbit mAb**

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP, IF-IC	H M R	Endogenous	14-16	Rabbit IgG	#Q6PUV4	10814

**Product Usage Information****Application**

Western Blotting  
Immunoprecipitation  
Immunofluorescence (Immunocytochemistry)

**Dilution**

1:1000  
1:50  
1:800

**Storage**

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

**Specificity/Sensitivity**

Complexin-1/2 (D8A6E) Rabbit mAb recognizes endogenous levels of total complexin-1 and complexin-2 protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro125 of human complexin-2 protein.

**Background**

Complexins are small soluble proteins composed of a central  $\alpha$ -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.

**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.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

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

**Applications Key**

**W:** Western Blotting **IP:** Immunoprecipitation **IF-IC:** Immunofluorescence (Immunocytochemistry)

**Cross-Reactivity Key**

**H:** Human **M:** Mouse **R:** Rat

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