

DOC2A Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP12839c**Specification**

DOC2A Antibody (Center) Blocking peptide - Product InformationPrimary Accession [Q14183](#)**DOC2A Antibody (Center) Blocking peptide - Additional Information****Gene ID** 8448**Other Names**

Double C2-like domain-containing protein alpha, Doc2, Doc2-alpha, DOC2A

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

DOC2A Antibody (Center) Blocking peptide - Protein Information**Name** DOC2A**Function**

Calcium sensor which most probably regulates fusion of vesicles with membranes. Binds calcium and phospholipids. May be involved in calcium dependent neurotransmitter release through the interaction with UNC13A. May be involved in calcium-dependent spontaneous release of neurotransmitter in absence of action potentials in neuronal cells. Regulates Ca(2+)-dependent secretory lysosome exocytosis in mast cells.

Cellular Location

Lysosome. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane; Peripheral membrane protein. Synapse, synaptosome

Tissue Location

Predominantly expressed in brain. Also expressed in testis.

DOC2A Antibody (Center) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

DOC2A Antibody (Center) Blocking peptide - Images

DOC2A Antibody (Center) Blocking peptide - Background

There are at least two protein isoforms of the Double C2 protein, namely alpha (DOC2A) and beta (DOC2B), which contain two C2-like domains. DOC2A and DOC2B are encoded by different genes; these genes are at times confused with the unrelated DAB2 gene which was initially named DOC-2. DOC2A is mainly expressed in brain and is suggested to be involved in Ca²⁺-dependent neurotransmitter release.

DOC2A Antibody (Center) Blocking peptide - References

Shimada, M., et al. Hum. Genet. 128(4):433-441(2010) Glessner, J.T., et al. Proc. Natl. Acad. Sci. U.S.A. 107(23):10584-10589(2010) Guilmatre, A., et al. Arch. Gen. Psychiatry 66(9):947-956(2009) Kumar, R.A., et al. PLoS ONE 4 (2), E4582 (2009) Higashio, H., et al. J. Immunol. 180(7):4774-4784(2008)