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DOC2A Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP12839c

Specification

DOC2A Antibody (Center) - Product Information

Application	**IHC-P, WB, FC,E**
Primary Accession	Q14183
Other Accession	Q14184, P70611, Q7TNF0, NP_003577.2
Reactivity	**Human**
Predicted	**Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**43959**
Antigen Region	**277-306**

DOC2A Antibody (Center) - Additional Information

Gene ID 8448

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

Target/Specificity
This DOC2A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 277-306 amino acids from the Central region of human DOC2A.

Dilution
IHC-P~~1:10~50
WB~~1:1000
FC~~1:10~50
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
DOC2A Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

DOC2A Antibody (Center) - Protein Information

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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

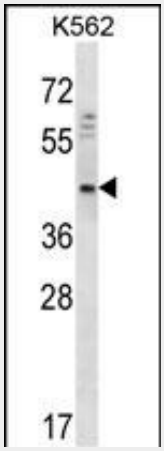
Tissue Location
Predominantly expressed in brain. Also expressed in testis.

DOC2A Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DOC2A Antibody (Center) - Images



DOC2A Antibody (Center) (Cat. #AP12839c) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the DOC2A antibody detected the DOC2A protein (arrow).

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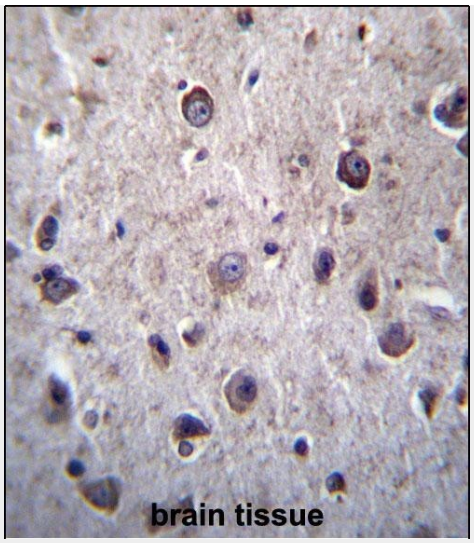
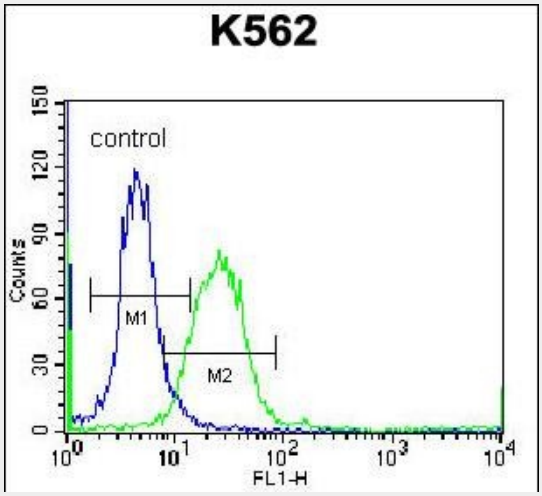


DOC2A Antibody (Center) (Cat. #AP12839c)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of DOC2A Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



DOC2A Antibody (Center) (Cat. #AP12839c) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.

DOC2A Antibody (Center) - 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 Ca(2+)-dependent neurotransmitter release.

DOC2A Antibody (Center) - References

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Glessner, J.T., et al. Proc. Natl. Acad. Sci. U.S.A. 107(23):10584-10589(2010)
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Higashio, H., et al. J. Immunol. 180(7):4774-4784(2008)