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Anti-Synaptopodin Antibody
Catalog # ABO12748

Specification

Anti-Synaptopodin Antibody - Product Information

Application	**WB**
Primary Accession	Q8N3V7
Host	**Rabbit**
Reactivity	**Human, Mouse**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Synaptopodin(SYNPO) detection. Tested with WB in Human;Mouse.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Synaptopodin Antibody - Additional Information

Gene ID 11346

Other Names
Synaptopodin, SYNPO, KIAA1029

Calculated MW
99463 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human, Mouse

Subcellular Localization
Cytoplasm, cytoskeleton . Cell junction, tight junction . Perikaryon . Cell projection, dendritic spine . Cell junction, synapse, postsynaptic cell membrane, postsynaptic density . Cell junction, synapse . Localized at the tight junction of cells. In brain, localized to the postsynaptic densities and in the perikarya. Associated with dendritic spines of a subset of synapses (By similarity). .

Tissue Specificity
Expressed in cerebral cortex. .

Protein Name
Synaptopodin

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human Synaptopodin (629-658aa EKPKVTPNPDLLDLVQTADEKRRQRDQGEV), different from the related mouse sequence

by one amino acid, and identical to the related rat sequence.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage

At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities
Belongs to the synaptopodin family.

Anti-Synaptopodin Antibody - Protein Information

Name SYNPO

Synonyms KIAA1029

Function
Actin-associated protein that may play a role in modulating actin-based shape and motility of dendritic spines and renal podocyte foot processes. Seems to be essential for the formation of spine apparatuses in spines of telencephalic neurons, which is involved in synaptic plasticity (By similarity).

Cellular Location
Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q8CC35}. Cell junction, tight junction {ECO:0000250|UniProtKB:Q8CC35}. Perikaryon {ECO:0000250|UniProtKB:Q8CC35}. Cell projection, dendritic spine {ECO:0000250|UniProtKB:Q8CC35}. Postsynaptic density {ECO:0000250|UniProtKB:Q8CC35}. Synapse {ECO:0000250|UniProtKB:Q8CC35} Cytoplasm, cytosol. Note=Localized at the tight junction of cells. In brain, localized to the postsynaptic densities and in the perikarya. Associated with dendritic spines of a subset of synapses. {ECO:0000250|UniProtKB:Q8CC35}

Tissue Location
Expressed in cerebral cortex.

Anti-Synaptopodin Antibody - 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

Anti-Synaptopodin Antibody - Images

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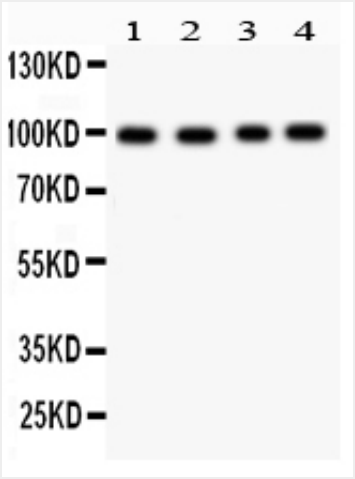

Anti- Synaptopodin antibody, ABO12748, Western blottingAll lanes: Anti Synaptopodin (ABO12748) at 0.5ug/mlLane 1: Mosue Brain Tissue Lysate at 50ugLane 2: U87 Whole Cell Lysate at 40ugLane 3: HEPG2 Whole Cell Lysate at 40ugLane 4: 293T Whole Cell Lysate at 40ugPredicted bind size: 99KDObserved bind size: 99KD

Anti-Synaptopodin Antibody - Background

Synaptopodin is also known as SYNPO. The spine apparatus (SA) is a specialized form of endoplasmic reticulum (ER) that is found in a subpopulation of dendritic spines in central neurons. The SA consists of a series of stacked discs that are thought to be connected to each other and to the dendritic system of ER-tubules. The actin binding protein synaptopodin (which has originally been described in podocytes of the kidney) is an essential component of the SA. Mice that lack the gene for synaptopodin do not form a spine apparatus. The SA is believed to play a critical role in learning and memory. In summary, an important function of the spine apparatus is the regulation of plasticity at individual synapses, a process known as metaplasticity. The International Radiation Hybrid Mapping Consortium mapped the SYNPO gene to chromosome 5.