

SYNGR2 Antibody

Catalog # ASC11047

Specification

SYNGR2 Antibody - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype
Application Notes

WB, IHC, IF 043760

AAI05993, 77415432

Human, Rat Rabbit Polyclonal

IgG

SYNGR2 antibody can be used for

detection of SYNGR2 by Western blot at 1 - 2 μ g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μ g/mL. For immunofluorescence start at 20

μg/mL.

SYNGR2 Antibody - Additional Information

Gene ID Target/Specificity SYNGR2: 9144

Reconstitution & Storage

SYNGR2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

SYNGR2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SYNGR2 Antibody - Protein Information

Name SYNGR2 (HGNC:11499)

Function

May play a role in regulated exocytosis. In neuronal cells, modulates the localization of synaptophysin/SYP into synaptic-like microvesicles and may therefore play a role in the formation and/or the maturation of this vesicles. May also play a role in GLUT4 storage and transport to the plasma membrane.

Cellular Location

Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:O54980}; Multi-pass membrane protein. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane

{ECO:0000250|UniProtKB:O54980}; Multi-pass membrane protein. Note=Localizes to cytoplasmic vesicles associated with the recycling endosomes. {ECO:0000250|UniProtKB:O54980}



Tissue Location

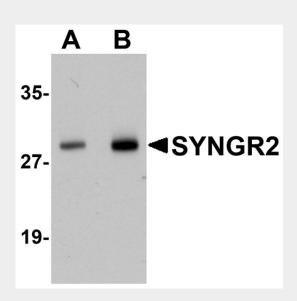
Ubiquitous; low expression in brain.

SYNGR2 Antibody - Protocols

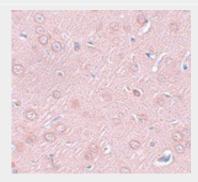
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

SYNGR2 Antibody - Images

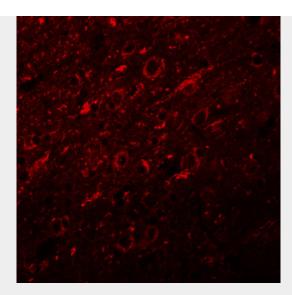


Western blot analysis of SYNGR2 in human lung tissue lysate with SYNGR2 antibody at (A) 1 and (B) 2 μ g/mL.



Immunohistochemistry of SYNGR2 in rat brain tissue with SYNGR2 antibody at 2.5 μg/mL.





Immunofluorescence of SYNGR2 in rat brain tissue with SYNGR2 antibody at 20 $\mu g/mL$.

SYNGR2 Antibody - Background

SYNGR2 Antibody: Synaptogyrins comprise a family of tyrosine-phosphorylated membrane proteins with two neuronal (SYNGR1 and SYNGR3) and one ubiquitous (SYNGR2) members. SYNGR1 and -3 are synaptic vesicle proteins, residing in some cases on the same synaptic vesicle, and are thought to be involved in the regulation of neurotransmitter release. SYNGR2, by contrast, is absent from synaptic vesicles. The role and localization of a fourth synaptogyrin, SYNGR4, is unclear. SYNGR3 is predominantly expressed in brain and placenta. The exact function of SYNGR2 is unknown, but studies suggest that it may play a role in regulating membrane traffic in non-neuronal cells.

SYNGR2 Antibody - References

Belizaire R, Komanduri C, Wooten K, et al. Characterization of synaptogyrin 3 as a new synaptic vesicle protein. J. Comp. Neurol.2004; 470:266-81.

Kedra D, Pan HQ, Seroussi E, et al. Characterization of the human synaptogyrin gene family. Hum. Genet.1998; 103:131-41.