

CXXC4 Antibody

Catalog # ASC11230

Specification

CXXC4 Antibody - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype

Application Notes

WB, IHC, IF <u>Q9H2H0</u>

NP_079488, 13376816 Human, Mouse, Rat

Rabbit Polyclonal

IgG

CXXC4 antibody can be used for detection of CXXC4 by Western blot at 1 μ g/mL.

Antibody can also be used for

immunohistochemistry starting at 10 µg/mL. For immunofluorescence start at 20

μg/mL.

CXXC4 Antibody - Additional Information

Gene ID **80319**

Target/Specificity CXXC4:

Reconstitution & Storage

CXXC4 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

CXXC4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CXXC4 Antibody - Protein Information

Name CXXC4

Synonyms IDAX

Function

Acts as a negative regulator of the Wnt signaling pathway via its interaction with DVL1 (By similarity). Binds preferentially to DNA containing cytidine-phosphate-guanosine (CpG) dinucleotides over CpH (H=A, T, and C), hemimethylated-CpG and hemimethylated-hydroxymethyl- CpG (PubMed:29276034).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q9EQC9}.

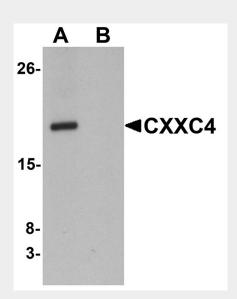


CXXC4 Antibody - Protocols

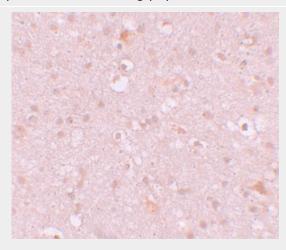
Provided below are standard protocols that you may find useful for product applications.

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

CXXC4 Antibody - Images

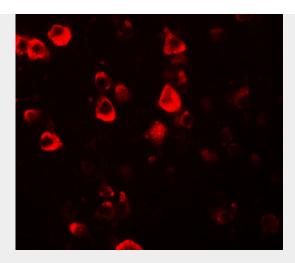


Western blot analysis of CXXC4 in human brain tissue lysate with CXXC4 antibody at 1 μ g/mL in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of CXXC4 in human brain tissue with CXXC4 antibody at 10 μg/mL.





Immunofluorescence of CXXC4 in human brain tissue with CXXC4 antibody at 20 µg/mL.

CXXC4 Antibody - Background

CXXC4 Antibody: CXXC4 is zinc finger protein that binds directly to the PDZ domain of DVL1, a protein involved in the Wnt signaling pathway, through its C-terminal region. CXXC4's interaction with DVL1 competes with DVL1-AXIN binding, although the affinity of DVL1 for CXXC4 is lower than that for AXIN. In mouse fibroblasts, CXXC4 suppressed Wnt3a induction of beta-catenin and inhibited Wnt3a-dependent TCF4 activation, suggesting that CXXC4 acts as a negative regulator of the Wnt signaling pathway and functions between DVL and beta-catenin. Recent reports suggest that decreased CXXC4 expression is associated with kidney cancer metastasis, cell proliferation, reduced apoptosis in response to cancer drugs, and upregulation of genes involved with proliferation, invasion and cell survival, suggesting that CXXC4 plays a critical role in tumor progression in kidney cancer.

CXXC4 Antibody - References

Hino S, Kishida S, Michuie T, et al. Inhibition of the Wnt signaling pathway by Idax, a novel Dvl-binding protein. Mol. Cell Biol.2001; 21:330-42.

Kojima T, Shimazui T, Hinotsu S, et al. Decreased expression of CXXC4 promotes a malignant phenotype in renal cell carcinoma by activating Wnt signaling. Oncogene 2009; 28:297-305.