

CXXC5 Antibody

Catalog # ASC11257

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q7LFL8
Other Accession	NP_057547 , 158261990
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	32977
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	CXXC5 antibody can be used for detection of CXXC5 by Western blot at 1 μ g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	51523
Other Names	CXXC-type zinc finger protein 5, CF5, Putative MAPK-activating protein PM08, Putative NF-kappa-B-activating protein 102, Retinoid-inducible nuclear factor, RINF, CXXC5
Target/Specificity	CXXC5; At least two isoforms of CXXC5 are known to exist. CXXC5 antibody is predicted to not cross-react with other CXXC protein family members.
Reconstitution & Storage	CXXC5 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	CXXC5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CXXC5
Function	May indirectly participate in activation of the NF-kappa-B and MAPK pathways. Acts as a mediator of BMP4-mediated modulation of canonical Wnt signaling activity in neural stem cells (By similarity). Required for DNA damage-induced ATM phosphorylation, p53 activation and cell cycle arrest. Involved in myelopoiesis. Transcription factor. Binds to the oxygen responsive element of COX4I2 and represses its transcription under hypoxia conditions (4% oxygen), as well as normoxia conditions (20% oxygen)

(PubMed:[23303788](#)). May repress COX4I2 transactivation induced by CHCHD2 and RBPJ (PubMed:[23303788](#)). 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

Nucleus. Cytoplasm {ECO:0000250|UniProtKB:Q5XIQ3} Note=Colocalizes with DVL1 in large bodies localized just outside the nuclear membrane. {ECO:0000250|UniProtKB:Q5XIQ3}

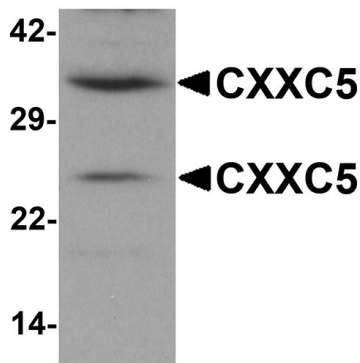
Background

CXXC5 Antibody: CXXC5 is zinc finger protein closely related to the DVL1-binding protein CXXC4 (also known as Idax), and like CXXC4 is thought to modulate the Wnt signaling pathway during development. CXXC5 is upregulated in neural stem cells upon BMP4 stimulation, leading to decreased levels of the Wnt-signaling target AXIN2 and facilitated the response of the stem cells to Wnt3a. Recent reports suggest CXXC5 transcription is activated by the Wilms tumor 1 (WT1) transcription factor, and together are involved in the WNT/beta-catenin pathway and play a role in embryonic kidney development.

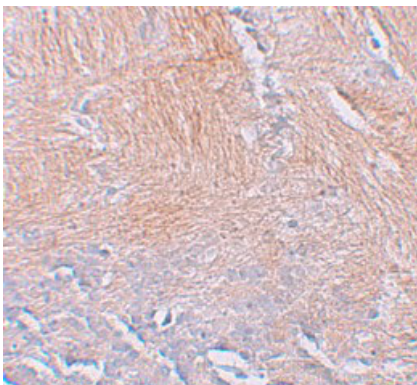
References

Andersson T, Sodersten E, Duckworth JK, et al. CXXC5 is a novel BMP4-regulated modulator of Wnt signaling in neural stem cells. *J. Biol. Chem.* 2009; 284:3672-81.
Kim MS, Yoon SK, Bollig F, et al. A novel Wilms tumor 1 (WT1) target gene negatively regulates the WNT signaling pathway. *J. Biol. Chem.* 2010; 285:14585-93.

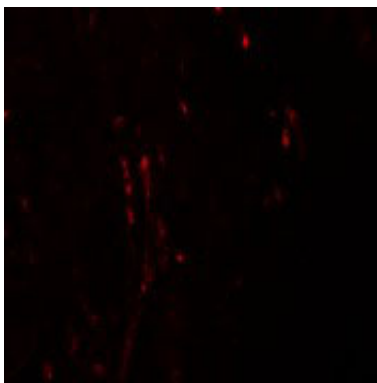
Images



Western blot analysis of CXXC5 in human brain tissue lysate with CXXC5 antibody at 1 µg/mL.



Immunohistochemistry of CXXC5 in human brain tissue with CXXC5 antibody at 2.5 µg/mL.



Immunofluorescence of CXXC5 in Human Brain tissue with CXXC5 antibody at 20 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.