

ZFP219 Antibody

Catalog # ASC11298

Product Information

Application WB, IF, E, IHC-P

Primary Accession <u>Q9P2Y4</u>

Other Accession NP_001095142, 156415996

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype IgG
Calculated MW 76877
Concentration (mg/ml) 1 mg/mL
Conjugate Unconjugated

Application Notes ZFP219 antibody can be used for detection of ZFP219 by Western blot at 1 - 2

□g/mL. Antibody can also be used for immunohistochemistry starting at 5

□g/mL. For immunofluorescence start at 20 □g/mL.

Additional Information

Gene ID 51222

Other Names Zinc finger protein 219, ZNF219

Target/Specificity ZNF219; At least two isoforms of ZFP219 are known to exist; this antibody will

recognize both.

Reconstitution & Storage ZFP219 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 ZFP219 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

Protein Information

Name ZNF219

Function Transcriptional regulator (PubMed: <u>14621294</u>, PubMed: <u>19549071</u>).

Recognizes and binds 2 copies of the core DNA sequence motif 5'-GGGGG- 3' (PubMed: 14621294). Binds to the HMGN1 promoter and may repress HMGN1 expression (PubMed: 14621294). Regulates SNCA expression in primary cortical neurons (PubMed: 19549071). Binds to the COL2A1 promoter and activates COL2A1 expression, as part of a complex with SOX9 (By similarity).

Plays a role in chondrocyte differentiation (By similarity).

Cellular Location Nucleus

Background

ZFP219 Antibody: ZFP219 is a developmentally regulated member of the Kruppel-like zinc finger gene family that is thought to function as a transcriptional repressor. Yeast two-hybrid screening showed association with Sox9, a transcription factor that is essential for chondrogenesis. ZFP219 is specifically expressed in the developing limb buds and colocalizes with Sox9 in the nucleus. Knockdown of ZFP219 expression decreased Sox9-induced mRNA expression, and a dominant-negative mutant of ZFP219 inhibited Bmp2-induced chondrocyte differentiation, suggesting that ZFP219 plays an important role as a transcriptional partner of Sox9 in the regulation of chondrocyte differentiation.

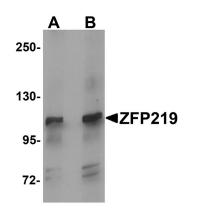
References

Sakai T, Toyoda A, Hashimoto K, et al. Isolation and characterization of a novel zinc finger gene, ZNF219, and mapping to the human chromosome 14q11 region. DNA Res. 2000; 7:137-41.

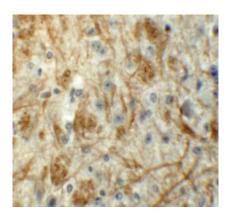
Sakai T, Hino K, Wada S, et al. Identification of the DNA binding specificity of the human ZNF219 protein and its function as a transcriptional repressor. DNA Res. 2003; 10:155-65.

Takigawa Y, Hata K, Muramatsu S, et al. The transcription factor Znf219 regulates chondrocyte differentiation by assembling a transcription factory with Sox9. J. Cell Sci. 2010; 123:3780-8.

Images

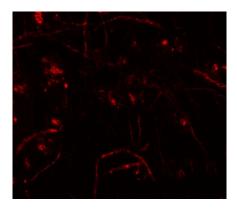


Western blot analysis of ZFP219 in mouse brain tissue lysate with ZFP219 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of ZFP219 in mouse brain tissue with ZFP219 antibody at 5 μ g/mL.

Immunofluorescence of ZFP219 in mouse brain tissue with ZFP219 antibody at 20 μ g/mL.



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