10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ZFP57 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18299C

Product Information

Application	WB, E
Primary Accession	Q9NU63
Other Accession	NP_001103279.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB38387
Calculated MW	51919
Antigen Region	269-296

Additional Information

Gene ID	346171
Other Names	Zinc finger protein 57 homolog, Zfp-57, Zinc finger protein 698, ZFP57, C6orf40, ZNF698
Target/Specificity	This ZFP57 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 269-296 amino acids from the Central region of human ZFP57.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ZFP57 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ZFP57 (HGNC:18791)
Synonyms	C6orf40, ZNF698
Function	Transcription regulator required to maintain maternal and paternal gene

	imprinting, a process by which gene expression is restricted in a parent of origin-specific manner by epigenetic modification of genomic DNA and chromatin, including DNA methylation. Acts by controlling DNA methylation during the earliest multicellular stages of development at multiple imprinting control regions (ICRs) (PubMed:18622393, PubMed:30602440). Acts together with ZNF445, but ZNF445 seems to be the major factor in human early embryonic imprinting maintenance. In contrast, in mice, ZFP57 plays the predominant role in imprinting maintenance (PubMed:30602440). Required for the establishment of maternal methylation imprints at SNRPN locus. Acts as a transcriptional repressor in Schwann cells. Binds to a 5'-TGCCGC-3' consensus sequence and recognizes the methylated CpG within this element (By similarity).
Cellular Location	Nucleus. Note=Binds various differentially methylated regions (DMR)

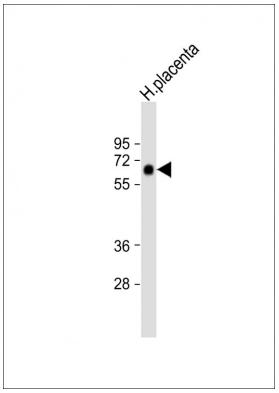
Background

The protein encoded by this gene is a zinc finger protein containing a KRAB domain. Studies in mouse suggest that this protein may function as a transcriptional repressor. Mutations in this gene have been associated with transient neonatal diabetes mellitus type 1 (TNDM1).

References

Spengler, S., et al. Eur J Med Genet 52(6):415-416(2009)
Barcellos, L.F., et al. PLoS Genet. 5 (10), E1000696 (2009) :
Tse, K.P., et al. Am. J. Hum. Genet. 85(2):194-203(2009)
Li, X., et al. Dev. Cell 15(4):547-557(2008)
Mackay, D.J., et al. Nat. Genet. 40(8):949-951(2008)

Images



Anti-ZFP57 Antibody (Center) at 1:1000 dilution + human placenta lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 52 kDa Blocking/Dilution buffer: 5% NFDM/TBST.