

**ZFP281 Antibody**  
Catalog # ASC11299**Specification****ZFP281 Antibody - Product Information**

Application	WB, IF
Primary Accession	<a href="#">O9Y2X9</a>
Other Accession	<a href="#">AAH51905</a> , <a href="#">6912752</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	ZFP281 antibody can be used for detection of ZFP281 by Western blot at 0.25 - 0.5 µg/mL. Antibody can also be used for immunofluorescence starting at 20 µg/mL. For immunofluorescence start at 20 µg/mL.

**ZFP281 Antibody - Additional Information**

Gene ID	23528
Target/Specificity	ZNF281;

**Reconstitution & Storage**

ZFP281 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**

ZFP281 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**ZFP281 Antibody - Protein Information**

**Name** ZNF281

**Synonyms** GZP1, ZBP99

**Function**

Transcription repressor that plays a role in regulation of embryonic stem cells (ESCs) differentiation. Required for ESCs differentiation and acts by mediating autorepression of NANOG in ESCs: binds to the NANOG promoter and promotes association of NANOG protein to its own promoter and recruits the NuRD complex, which deacetylates histones. Not required for establishment and maintenance of ESCs (By similarity). Represses the transcription of a number of genes including GAST, ODC1 and VIM. Binds to the G-rich box in the enhancer region of these genes.

**Cellular Location**

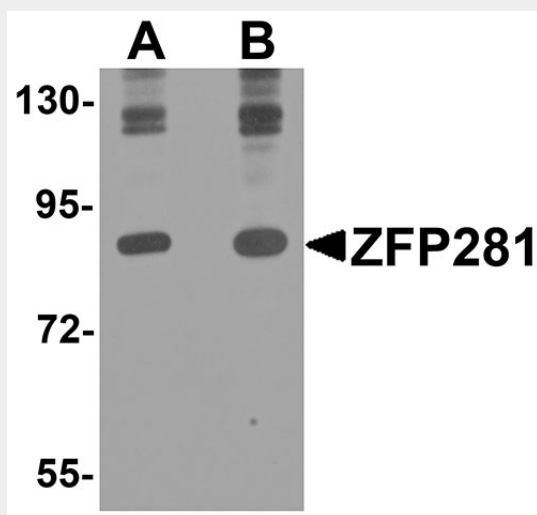
Nucleus.

### ZFP281 Antibody - Protocols

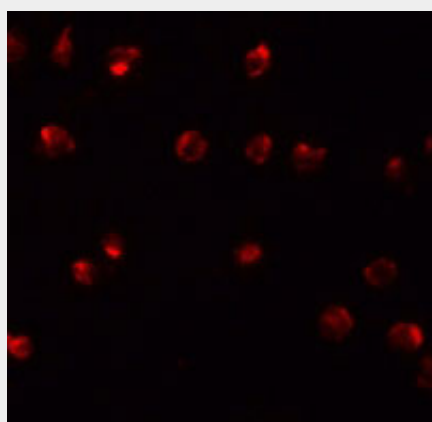
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### ZFP281 Antibody - Images



Western blot analysis of ZFP281 in A-20 cell lysate with ZFP281 antibody at (A) 0.25 and (B) 0.5  $\mu\text{g/mL}$ .



Immunofluorescence of ZFP281 in A20 cells with ZFP281 antibody at 20  $\mu\text{g/mL}$ .

### ZFP281 Antibody - Background

ZFP281 Antibody: ZFP281, also known as ZBP-99, is a member of a conserved family of

transcription factors that interact with GC-rich promoters. It contains four Kruppel-like zinc fingers and is highly homologous to ZBP-89, another regulator of ornithine decarboxylase gene expression. ZFP281 also interacts with many other other transcription factors, such as Sp1 to repress vimentin gene transcription. ZFP281 has also been shown to control embryonic stem cell pluripotency by direct regulating specific target genes. ZFP281 physically interacts with the transcription factors POU5F1, Sox2, and NANOG. Gene expression microarray analysis indicated that some ZFP281 target genes were activated, while others were repressed upon knockdown of ZFP281 expression, showing that ZFP281 plays bifunctional roles in regulating gene expression in stem cells.

### **ZFP281 Antibody - References**

Law DJ, Du M, Law GL, et al. ZBP-99 defines a conserved family of transcription factors and regulates ornithine decarboxylase gene expression. *Biochem. Biophys. Res. Commun.* 1999; 262:113-20.

Zhang X, Diab IH, and Zehner ZE. ZBP-89 represses vimentin gene transcription by interacting with the transcriptional activator, Sp1. *Nuc. Acids Res.* 2003; 31:2900-14.

Wang ZX, Teh CHL, Chan CMY, et al. The transcription factor Zfp281 controls embryonic stem cell pluripotency by direct activation and repression of target genes. *Stem Cells* 2008; 26:2791-9