

### **ZIMP10 Antibody**

Catalog # ASC11301

## Specification

## **ZIMP10 Antibody - Product Information**

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype
Application Notes

WB, IF, ICC, E

Q9ULJ6

NP 65071, 31543543

Human Rabbit Polyclonal

IqG

ZIMP10 antibody can be used for detection of ZIMP10 by Western blot at 0.5 µg/mL.

Antibody can also be used for

immunocytochemistry starting at 10

µg/mL. For immunofluorescence start at 20

μg/mL.

### **ZIMP10** Antibody - Additional Information

Gene ID 57178

# **Target/Specificity**

ZMIZ1; At least three isoforms are known to exist; this antibody will recognize all three. ZIMP10 antibody is predicted to not cross-react with other PIAS protein family members.

### **Reconstitution & Storage**

ZIMP10 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**

ZIMP10 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **ZIMP10 Antibody - Protein Information**

Name ZMIZ1 (<u>HGNC:16493</u>)

Synonyms KIAA1224, RAI17, ZIMP10

#### **Function**

Acts as a transcriptional coactivator. Increases ligand- dependent transcriptional activity of AR and promotes AR sumoylation. The stimulation of AR activity is dependent upon sumoylation (PubMed:<a href="http://www.uniprot.org/citations/14609956" target="\_blank">14609956</a>, PubMed:<a href="http://www.uniprot.org/citations/26522984" target="\_blank">26522984</a>). Also functions as a transcriptional coactivator in the TGF-beta signaling pathway by increasing the activity of the SMAD3/SMAD4 transcriptional complex (PubMed:<a href="http://www.uniprot.org/citations/16777850" target="\_blank">16777850</a>). Involved in



transcriptional activation of a subset of NOTCH1 target genes including MYC. Involved in thymocyte and T cell development (By similarity). Involved in the regulation of postmitotic positioning of pyramidal neurons in the developing cerebral cortex (PubMed:<a href="http://www.uniprot.org/citations/30639322" target="\_blank">30639322</a>).

### **Cellular Location**

Nucleus, nucleoplasm. Cytoplasm. Nucleus Note=Enriched at replication foci throughout S phase

### **Tissue Location**

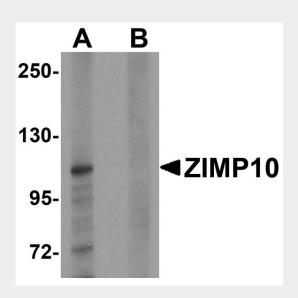
Expressed most abundantly in ovary and, at lower levels, in prostate, spleen and testis. Weak expression, if any, in thymus, small intestine, colon and peripheral blood leukocytes

### **ZIMP10 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
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### ZIMP10 Antibody - Images

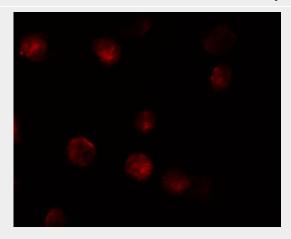


Western blot analysis of ZIMP10 in K562 cell lysate with ZIMP10 antibody at 0.5  $\mu$ g/mL in (A) the absence and (B) the presence of blocking peptide





Immunocytochemistry of ZIMP10 in K562 cells with ZIMP10 antibody at 10 µg/mL.



Immunofluorescence of ZIMP10 in K562 cells with ZIMP10 antibody at 20 μg/mL.

### ZIMP10 Antibody - Background

ZIMP10 Antibody: ZIMP10, also known as ZMIZ1, is a novel PIAS (protein inhibitor of activated signal transducer and activator of transcription)-like protein initially identified as a transcriptional co-activator of the androgen receptor (AR). ZIMP10 and the related protein ZIMP7 interact with PIAS3 and enhances AR-mediated transcription. Later experiments showed that ZIMP10 is also a co-activator of the p53 tumor suppressor. Mice deficient in ZIMP10 result in embryonic lethality by E10.5; these embryos reveal severe defects in the reorganization of the yolk sac vascular plexus, indicating that ZIMP10 plays an important role in proper vascular development.

## **ZIMP10 Antibody - References**

Sharma M, Li X, Wang Y, et al. hZimp10 is an androgen receptor co-activator and forms a complex with sUMO-1 at replication foci. EMBO J. 2003; 22:6101-14.

Beliakoff J and Sun Z. Zimp7 and Zimp10, two novel PIAS-like proteins, function as androgen receptor coregulators. Nucl. Recept. Signal. 2006; 4:e017.

Lee J, Beliakoff J, and Sun Z. The novel PIAS-like protein hZimp10 is a transcriptional co-activator of the p53 tumor suppressor. Nuc. Acids Res. 2007; 35:4523-34

Beliakoff J, Lee J, Ueno H, et al. The PIAS-like protein Zimp10 is essential for embryonic viability and proper vascular development. Mol. Cell. Biol. 2008; 28:282-92.