

### **SLC39A9 Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP50829

## **Specification**

## **SLC39A9 Antibody - Product Information**

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW
Antigen Region

WB
O9NUM3
Human, Rat
Rabbit
Polyclonal
32,30,25 KDa
118-146

# **SLC39A9 Antibody - Additional Information**

#### **Gene ID** 55334

#### **Other Names**

Zinc transporter ZIP9, Solute carrier family 39 member 9, Zrt- and Irt-like protein 9, ZIP-9, SLC39A9, ZIP9

### **Dilution**

WB~~ 1:1000

#### **Format**

Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

## **Storage Conditions**

-20°C

### **SLC39A9 Antibody - Protein Information**

Name SLC39A9 (HGNC:20182)

Synonyms ZIP9

### **Function**

Transports zinc ions across cell and organelle membranes into the cytoplasm and regulates intracellular zinc homeostasis (PubMed:<a href="http://www.uniprot.org/citations/19420709" target="\_blank">19420709</a>, PubMed:<a href="http://www.uniprot.org/citations/25014355" target="\_blank">25014355</a>, PubMed:<a href="http://www.uniprot.org/citations/28219737" target="\_blank">28219737</a>). Participates in the zinc ions efflux out of the secretory compartments (PubMed:<a href="http://www.uniprot.org/citations/19420709" target="\_blank">19420709</a>). Regulates intracellular zinc level, resulting in the enhancement of AKT1 and MAPK3/MAPK1 (Erk1/2) phosphorylation in response to the BCR activation (PubMed:<a href="http://www.uniprot.org/citations/23505453" target="blank">23505453</a>).



Also functions as a membrane androgen receptor that mediates, through a G protein, the non-classical androgen signaling pathway, characterized by the activation of MAPK3/MAPK1 (Erk1/2) and transcription factors CREB1 or ATF1 (By similarity). This pathway contributes to CLDN1 and CLDN5 expression and tight junction formation between adjacent Sertoli cells (By similarity). Mediates androgen-induced vascular endothelial cell proliferation through activation of an inhibitory G protein leading to the AKT1 and MAPK3/MAPK1 (Erk1/2) activation which in turn modulate inhibition (phosphorylation) of GSK3B and CCND1 transcription (PubMed:<a href="http://www.uniprot.org/citations/34555425" target="\_blank">34555425</a>). Moreover, has dual functions as a membrane-bound androgen receptor and as an androgen-dependent zinc transporter both of which are mediated through an inhibitory G protein (Gi) that mediates both MAP kinase and zinc signaling leading to the androgen-dependent apoptotic process (PubMed:<a href="http://www.uniprot.org/citations/25014355" target="\_blank">25014355</a>/a>, PubMed:<a href="http://www.uniprot.org/citations/28219737" target=" blank">28219737</a>/a>).

#### **Cellular Location**

Golgi apparatus, trans-Golgi network membrane. Cell membrane; Multi-pass membrane protein. Cytoplasm, perinuclear region Mitochondrion. Nucleus

#### **Tissue Location**

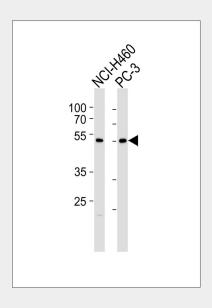
Highly expressed in pancreas, testis, and pituitary and moderately in the kidney, liver, uterus, heart, prostate, and brain, whereas expression is lower in the ovary and colon

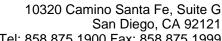
## **SLC39A9 Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

#### SLC39A9 Antibody - Images







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Western blot analysis of lysates from NCI-H460,PC-3 cell line (from left to right), using SLC39A9 Antibody, was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

# SLC39A9 Antibody - Background

May act as a zinc-influx transporter (By similarity).

# **SLC39A9 Antibody - References**

Clark H.F., et al. Genome Res. 13:2265-2270(2003). Ota T., et al. Nat. Genet. 36:40-45(2004). Lin L., et al. Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases. Suzuki Y., et al. Submitted (APR-2005) to the EMBL/GenBank/DDBJ databases.