

ZIP9 Polyclonal Antibody

Catalog # AP73134

Specification

ZIP9 Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality WB <u>O9NUM3</u> Human, Rat Rabbit Polyclonal

ZIP9 Polyclonal Antibody - Additional Information

Gene ID 55334

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

Dilution WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions -20°C

ZIP9 Polyclonal Antibody - Protein Information

Name SLC39A9 (<u>HGNC:20182</u>)

Synonyms ZIP9

Function

Transports zinc ions across cell and organelle membranes into the cytoplasm and regulates intracellular zinc homeostasis (PubMed:19420709, PubMed:25014355, PubMed:28219737). Participates in the zinc ions efflux out of the secretory compartments (PubMed:19420709). Participates in the zinc ions efflux out of the secretory compartments (PubMed:19420709). Regulates intracellular zinc level, resulting in the enhancement of AKT1 and MAPK3/MAPK1 (Erk1/2) phosphorylation in response to the BCR activation (PubMed:23505453). 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:34555425). 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:25014355, PubMed:28219737).

Cellular Location

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

Tissue Location

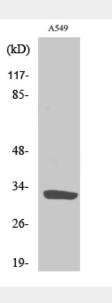
Highly expressed in pancreas, testis, and pituitary and moderately in the kidney, liver, uterus, heart, prostate, and brain, whereas expression is lower in the ovary and colon

ZIP9 Polyclonal Antibody - Protocols

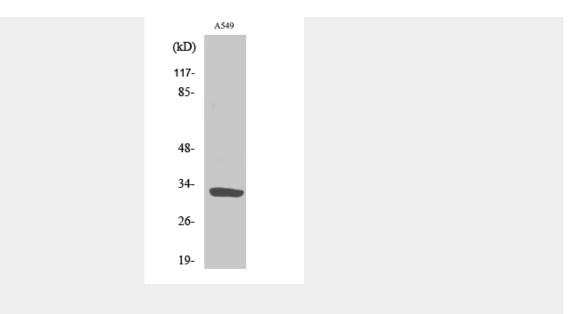
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

ZIP9 Polyclonal Antibody - Images







ZIP9 Polyclonal Antibody - Background

May act as a zinc-influx transporter.