

SLC30A8 Antibody

Catalog # ASC12029

Specification

SLC30A8 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Application Notes

WB, E <u>O8IWU4</u> <u>64762489</u>, <u>NP_776250</u>, <u>169026</u> Human Rabbit Polyclonal IgG 40755 SLC30A8 antibody can be used for Western blot at 1 - 2 μg/mL.

SLC30A8 Antibody - Additional Information

Gene ID 169026 Other Names SLC30A8 Antibody: Solute carrier family 30 member 8, zinc transporter 8, ZNT8, Zn-T8

Precautions

SLC30A8 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SLC30A8 Antibody - Protein Information

Name SLC30A8 (HGNC:20303)

Function

Proton-coupled zinc ion antiporter mediating the entry of zinc into the lumen of pancreatic beta cell secretory granules, thereby regulating insulin secretion.

Cellular Location

Cytoplasmic vesicle, secretory vesicle membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Note=Associated with insulin and glucagon secretory granules.

Tissue Location

In the endocrine pancreas, expressed in insulin- producing beta cells. Expressed at relatively high levels in subcutaneous fat tissue from lean persons; much lower levels in visceral fat, whether from lean or obese individuals, and in subcutaneous fat tissue from obese individuals. Expressed in peripheral blood mononuclear cells, including T-cells and B-cells, with great variation among individuals ranging from negative to strongly positive

SLC30A8 Antibody - Protocols



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

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

SLC30A8 Antibody - Images



Western blot analysis of SLC30A8 in human pancreas tissue lysate with SLC30A8 antibody at 1 μ g/ml in (A) the absence and (B) the presence of blocking peptide

SLC30A8 Antibody - Background

SLC30A8 Antibody: SLC30A8 is a zinc efflux transporter involved in the accumulation of zinc in intracellular vesicles and is expressed at a high level in the pancreas, particularly in islets of Langerhans, and co-localizes with insulin in the secretory pathway granules of the insulin-secreting INS-1 cells (1). Allelic variants of SLC30A8 have been identified as major genetic risk factors for the development of Type 2 diabetes (2), but no genetic association has been found with Type 1 diabetes (3). SLC30A8 expression in []-cells was found to be influenced by cytokine expression, particularly IFN-gamma and IL-1beta (4).

SLC30A8 Antibody - References

Chimienti F, Devergnas S, Favier A, et al. Identification and cloning of a beta-cell-specific zinc transporter, ZnT-8, localized into insulin secretory granules. Diabetes 2004; 53:2330-7.;Sladek R, Rocheleau G, Rung J, et al. A genome-wide association study indentifies novel risk loci for type 2 diabetes. Science 2007; 445:881-5.;Qu HQ, Grant SF, Bradfield JP, et al. Association analysis of type 2 diabetes Loci in type 1 diabetes. Diabetes 2008; 57:1983-6.;Egefjord L, Jensen JL, Bang-Berthelsen CH, et al. Zinc transporter gene expression is regulated by pro-inflammatory cytokines: a potential role for zinc transporters in beta-cell apoptosis? BMC Endocrine Disorders 2009; 9:7.