

SLC30A8 Antibody

Catalog # ASC12029

Product Information

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| Application | WB, E |
| Primary Accession | Q8IWU4 |
| Other Accession | 64762489 , NP_776250 , 169026 |
| Reactivity | Human |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | IgG |
| Calculated MW | 40755 |
| Application Notes | SLC30A8 antibody can be used for Western blot at 1 - 2 μ g/mL. |

Additional Information

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| 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. |

Protein Information

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| 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 |

Background

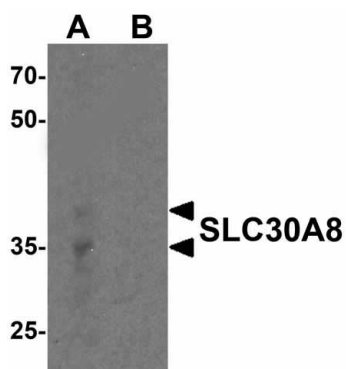
SLC30A8 Antibody: SLC30A8 is a zinc efflux transporter involved in the accumulation of zinc in intracellular

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 β -cells was found to be influenced by cytokine expression, particularly IFN-gamma and IL-1beta (4).

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 identifies 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.

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.