



ZnT-8 Monoclonal Antibody

Catalog No	YP-mAb-04280
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	SLC30A8
Immunogen	The antiserum was produced against synthesized peptide derived from human SLC30A8. AA range:171-220
Specificity	ZnT-8 Monoclonal Antibody detects endogenous levels of ZnT-8 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	SLC30A8;solute carrier family 30 (zinc transporter);member 8;Solute carrier family 30 member 8;Zinc transporter 8;zinc transporter ZnT-8;ZnT-8;ZNT8
Observed Band	41kD
Calculated Molecular Weight	41kD
Cell Pathway	Cell membrane ; Multi-pass membrane protein . Cytoplasmic vesicle, secretory vesicle membrane ; Multi-pass membrane protein . Associated with insulin and glucagon secretory granules. .
Tissue Specificity	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.
Function	domain:Contains a histidine-rich region, HXXXXXHNH-motif, which is a ligand for zinc.,function:Facilitates the accumulation of zinc from the cytoplasm into intracellular vesicles, being a zinc-efflux transporter. May be a major component for providing zinc to insulin maturation and/or storage processes in insulin-secreting pancreatic beta-cells.,polymorphism:Variant Trp-325 is a risk factor



that confers susceptibility to diabetes mellitus, noninsulin-dependent (NIDDM) [MIM:125853].,similarity:Belongs to the cation diffusion facilitator (CDF) transporter (TC 2.A.4) family. SLC30A subfamily.,subcellular location:Strictly associated with the insulin granule secretory.,tissue specificity:Strictly restricted to the pancreas islets cells. Found in insulin-producing beta cells and colocalized with insulin.,

Background

The protein encoded by this gene is a zinc efflux transporter involved in the accumulation of zinc in intracellular vesicles. This gene is expressed at a high level only in the pancreas, particularly in islets of Langerhans. The encoded protein colocalizes with insulin in the secretory pathway granules of the insulin-secreting INS-1 cells. Allelic variants of this gene exist that confer susceptibility to diabetes mellitus, noninsulin-dependent (NIDDM). Several transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Mar 2010],

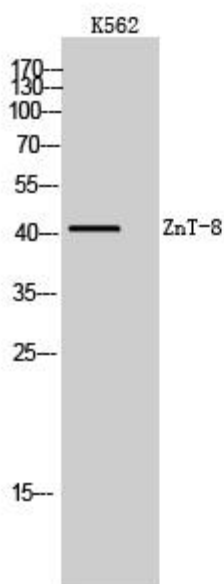
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using ZnT-8 Monoclonal Antibody