



DHE3 mouse mAb

Catalog No	YP-mAb-11722
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	GLUD1 GLUD
Immunogen	Synthesized peptide derived from human DHE3
Specificity	This antibody detects endogenous levels of DHE3 at Human/Mouse/Rat
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	EC:1.4.1.3;GDH;GDH 1;GDH1;GLUD;DHE3;GLUD1 GLUD
Observed Band	61kD
Calculated Molecular Weight	61kD
Cell Pathway	Mitochondrion . Endoplasmic reticulum . Mostly translocates into the mitochondria, only a small amount of the protein localizes to the endoplasmic reticulum. .
Tissue Specificity	
Function	catalytic activity:L-glutamate + H(2)O + NAD(P)(+) = 2-oxoglutarate + NH(3) + NAD(P)H.,disease:Defects in GLUD1 are the cause of hyperinsulinism-hyperammonemia syndrome (HHS) [MIM:606762]. Elevated oxidation rate of glutamate to alpha-ketoglutarate stimulates insulin secretion in the pancreatic beta cells, while they impair detoxification of ammonium in the liver.,enzyme regulation:Subject to allosteric regulation. Activated by ADP. Inhibited by GTP and ATP. ADP can occupy the NADH binding site and activate the enzyme.,function:May be involved in learning and memory reactions by increasing the turnover of the excitatory neurotransmitter glutamate.,online information:Glutamate dehydrogenase 1 entry,similarity:Belongs to the Glu/Leu/Phe/Val dehydrogenases family.,subunit:Homo-hexamer.,



Background

This gene encodes glutamate dehydrogenase, which is a mitochondrial matrix enzyme that catalyzes the oxidative deamination of glutamate to alpha-ketoglutarate and ammonia. This enzyme has an important role in regulating amino acid-induced insulin secretion. It is allosterically activated by ADP and inhibited by GTP and ATP. Activating mutations in this gene are a common cause of congenital hyperinsulinism. Alternative splicing of this gene results in multiple transcript variants. The related glutamate dehydrogenase 2 gene on the human X-chromosome originated from this gene via retrotransposition and encodes a soluble form of glutamate dehydrogenase. Related pseudogenes have been identified on chromosomes 10, 18 and X. [provided by RefSeq, Jan 2016],

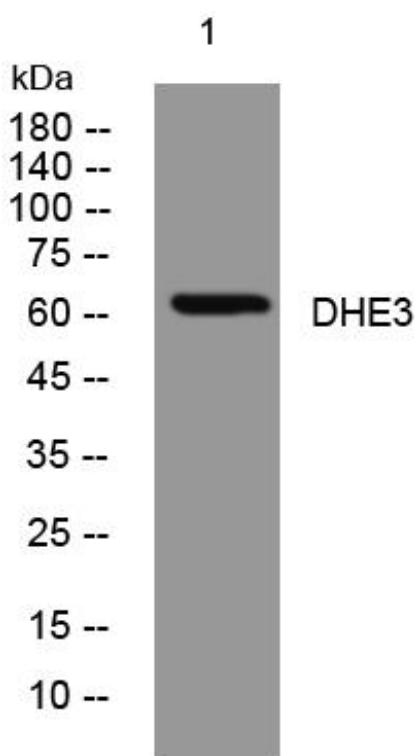
matters needing attention

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 DHE3 mouse mAb