

Recombinant Human Isocitrate Dehydrogenase 1/IDH1 (C-6His)

Catalog No: C943

Description	Recombinant Human Isocitrate Dehydrogenase is produced by our Mammalian expression system and the target gene encoding Met1-Leu414 is expressed with a 6His tag at the C-terminus.
Source	Human Cells
Alternative name	Isocitrate Dehydrogenase [NADP] Cytoplasmic, IDH, Cytosolic NADP-Isocitrate Dehydrogenase, IDP, NADP(+)-Specific ICDH, Oxalosuccinate Decarboxylase, IDH1, PICD
Accession No.	O75874
Formulation	Supplied as a 0.2 µm filtered solution of PBS.
Quality Control	Purity: Greater than 95% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.
Shipping	The product is shipped on dry ice/polar packs. Upon receipt, store it immediately at the temperature listed below.
Storage	Store at < -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.

Amino Acid Sequence

MSKKISGGSVVEMQGDDEMTRIIEWELIKEKLIFPYVELDLHSYDLGIENRDATNDQVTKDAAEAIK
KHNVGVKCATITPDEKRVVEEFKLKQMWKSPNGTIRNLLGGTVFREAICKNIPRLVSGWVKPIII
GRHAYGDQYRATDFVVPGPVKVEITYTPSDGTQKVITYLVHNFEEGGGVAMGMYNQDKSIEDFAHS
SFQMALSKGWPLYLSTKNTILKKYDGRFKDIFQEYDKQYKSQFEAQKIWYEHRLIDDMVAQAMK
SEGGFIWACKNYDGDVQSDSVAQGYGSLGMMTSVLVCPDGKTVEAEAAHGTVTRHYRMYQKGQET
STNPIASIFAWTRGLAHRKLDNNKELAFFANALEEVSITIEAGFMTKDLAACIKGLPNVQRSD
YLNTFEFMDKLGKLNKIKLAQAKLVDDHHHHH

Background

Isocitrate Dehydrogenase [NADP] Cytoplasmic (IDH1) belongs to the isocitrate and isopropylmalate dehydrogenases family. IDH1 exists as a homodimer, binding one magnesium or manganese ion per subunit. Mutations of IDH1 have been shown to cause metaphyseal chondromatosis with aciduria and are involved in the development of glioma IDH plays a role in the regeneration of NADPH for intraperoxisomal reductions, such as the conversion of 2, 4-dienoyl-CoAs to 3-enoyl-CoAs, as well as in peroxisomal reactions that consume 2- oxoglutarate, namely the α-hydroxylation of phytanic acid.

SDS-Page

