

Isocitrate Dehydrogenase-1 Human Recombinant

Item Number	rAP-0987
Synonyms	Isocitrate dehydrogenase [NADP] cytoplasmic, EC 1.1.1.42, Cytosolic NADP-isocitrate dehydrogenase, Oxalosuccinate decarboxylase, IDH, NADP(+)-specific ICDH, IDP, PICD.
Description	IDH1 Human Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 434 amino acids (1-414) and having a molecular mass of 48.8 kDa. IDH1 is fused to a 20 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.
Uniprot Accession Number	O75874
Amino Acid Sequence	MGSSHHHHHH SSGLVPRGSH MSKKISGGSV VEMQGDEMTR IIWELIKEKL IFPYVELDLH SYD-LGIENRD ATNDQVTKDA AEAIKKHNVG VKCATITPDE KRVEEFKLLKQ MWKSPNGTIR NILGGTVFRE AIICKNIPRL VSGWVKPIII GRHAYGDQYR ATDFVVPGP G KVEITYTPSD GTQKVTYLVH NFEEGGGVAM GMYNQDKSIE DFAHSSFQMA LSKGWPLYLS TKNLTKKYD GRFKDIFQEI YDKQYKSQFE AQKIWYEHRL IDDMVAQAMK SEGGFIWACK NYDGDVQSDS VAQGYGSLGM MTSVLVCPDG KTVE-
Source	E.coli.
Physical Appearance and Stability	Sterile Filtered colorless solution. Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.
Formulation and Purity	The IDH1 solution (1mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 0.1M NaCl, 1mM DTT, 0.1mM PMSF and 20% glycerol. Greater than 95% as determined by SDS-PAGE.
Application	
Solubility	
Biological Activity	The Specific activity is > 0.7 units/ml. One unit will convert 1.0 umole of isocitrate to alpha-ketoglutarate per minute at pH7.5 at 25C.
Shipping Format and Condition	Lyophilized powder at room temperature.

Optimal dilutions should be determined by each laboratory for each application. The listed dilutions are for recommendation only and the final conditions should be optimized by the ender users! This product is sold for **Research Use Only**