

**IDH1, 1-414aa, Human, His tag, E.coli**

**Cat.NO.: TP02553**

3th Edition

**Synonyms:** Isocitrate dehydrogenase [NADP] cytoplasmic, IDCD, IDH, IDP, IDPC, PICD.

**Description:** IDH1, also known as isocitrate dehydrogenase (IDHC) cytoplasmic enzyme, belongs to the isocitrate and isopropylmalate dehydrogenases family. This protein catalyzes the third step of the citric acid cycle, which involves the oxidative decarboxylation of isocitrate, forming  $\alpha$ -ketoglutarate and CO<sub>2</sub> in a two step reaction.

**Form:** Liquid. 20mM Tris-HCl buffer (pH8.0) containing 20% glycerol 0.1M NaCl, 1mM DTT, 0.1mM PMSF

**Molecular Weight:** 48.8 kDa (434aa), confirmed by MALDI-TOF

**Sequences:**

MGSSHHHHHSSGLVPRGSHMSKKISGGSSVEMQGDDEMTRIIWELIKEKLIFPYVELDLHSYDLGIENRDATNDQV  
TKDAAEAIKKHNVGVKCATITPDEKRVVEEFKLKQMWKSPNGTIRNILGGTVFREAIICKNIPRLVSGWVKPIIIGRHAY  
GDQYRATDFVVPGPVKVEITYTPSDGTQKVTYLVHNFEEGGGVAMGMYNQDKSIEDFAHSSFQMALSKGWPLYL  
STKNTILKKYDGRFKDIFQEIYDKQYKSQFEAQKIWYEHRLIDDMVAQAMKSEGGFIWACKNYDGDVQSDSVAQGY  
GSLGMMTSVLVCPDGKTVEAAAHGTVTRHYRMYQKGQETSTNPIASIFAWTRGLAHRAKLDNNKELAFFANALE  
EVSITIEAGFMTKDLAACIKGLPNVQRSDYLNTFEFMDKLGENLKIKLAQAKL

**Purity:** > 95% by HPLC

**Concentration:** 1.0 mg/ml (determined by Bradford assay)

**Endotoxin Level:** <1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.