

## 32-8701: Recombinant Human Isocitrate Dehydrogenase 1/IDH1 (R132H, C-8His)

**Gene :** IDH1  
**Gene ID :** 3417  
**Uniprot ID :** O75874

### Description

Source: E.coli.  
MW :48.1kD.

Recombinant Human Isocitrate Dehydrogenase is produced by our E.coli expression system and the target gene encoding Met1-Leu414 is expressed with a 8His tag at the C-terminus. 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  $\alpha$ -hydroxylation of phytanic acid.

### Product Info

**Amount :** 10  $\mu$ g / 50  $\mu$ g  
**Content :** Supplied as a 0.2  $\mu$ m filtered solution of 50mM Tris, 200mM NaCl, 10% glycerol, pH8.0.  
**Storage condition :** Store at -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.  
**Amino Acid :** MSKKISGGSVVEMQGDEMTRIIWELIKEKLIFPYVELDLHSYDLGIENRDATNDQVTKDAAEAIKKHNVGKCAT  
ITPDEKRVEEFKQMWKSPNGTIRNILGGTVFREAICKNIPRLVSGWVKPIIGHHAYGDQYRATDFVVPGPVK  
VEITYTPSDGTQKVTVLHNFEEGGVAMGMYNQDKSIEDFAHSSFQMAKSGWPLYLSTKNTILKKYDGRFK  
DIFQEIYDKQYKSQFEAQKIWYEHRLIDDMVAQAMKSEGGFIWACKNYDGDVQSDSVAQGYGSLGMMTSVLV  
CPDGKTVEAAAHGTVTRHYRMYQKGQETSTNPIASIFAWTRGLAHRAKLDNNKELAFFANALEEVSITIEAGF  
MTKDLAACIKGLPNVQRSDYLNTFEFMDKLGENLKIKLAQAKLSLEHHHHHHHH

### Application Note

**Endotoxin :** Less than 0.1 ng/ $\mu$ g (1 IEU/ $\mu$ g).