

# Recombinant Protein Technical Manual Recombinant Human IDH1 Protein (R132H, C-8His)

**RPES2708** 

#### **Product Data:**

**Product SKU:** RPES2708 **Size:** 10μg

Species: Human Expression host: E. coli

**Uniprot:** 075874

### **Protein Information:**

Molecular Mass: 48.1 kDa

AP Molecular Mass: 40-50 kDa

Tag: C-8His

**Bio-activity:** 

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:**  $< 1.0 \text{ EU per } \mu\text{g}$  as determined by the LAL method.

**Storage:** Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

**Shipping:** This product is provided as liquid. It is shipped at frozen temperature with blue

ice/gel packs. Upon receipt, store it immediately at<-20°C.

Formulation: Supplied as a 0.2 μm filtered solution of 50mM Tris, 200mM NaCl, 10% glycerol,

pH8.0.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** 

**Synonyms:** Isocitrate Dehydrogenase [NADP] Cytoplasmic; IDH; Cytosolic NADP-Isocitrate

Dehydrogenase; IDP; NADP(+)-Specific ICDH; Oxalosuccinate Decarboxylase; IDH1;

**PICD** 

## Immunogen Information:

Sequence: Met1-Leu414(Arg132His)

## **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  $\alpha$ -hydroxylation of phytanic acid.