

Human IDH1 Protein

Cat. No. IDH-HE101

Description

Source	Recombinant Human IDH1 Protein is expressed from E.coli with His tag at the C-Terminus. It contains Ser2-Leu414.
Accession	O75874
Molecular Weight	The protein has a predicted MW of 47.35 kDa same as Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 90% as determined by HPLC

Formulation and Storage

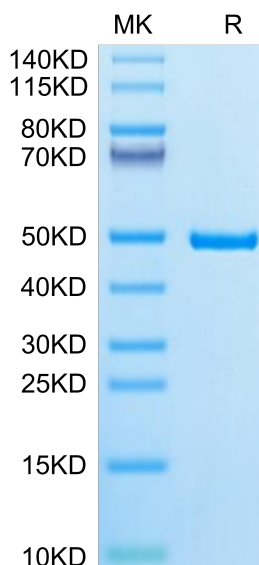
Formulation	Supplied as 0.22µm filtered solution in 50mM Tris, 200mM NaCl, 1mM DTT, 10% Glycerol (pH 7.5).
Storage	Valid for 12 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Isocitrate dehydrogenase (IDH) is a metabolic enzyme that converts isocitrate to α -ketoglutarate (α -KG). Genetic gain-of-function mutations in IDH1 and IDH2 confer a neomorphic activity that allow reduction of α -KG to (R)-2-hydroxyglutarate, the accumulation of which results in the development of cancers like low grade gliomas and leukemia. Isocitrate dehydrogenase 1 (IDH1) is the most frequently mutated metabolic gene in cancer.

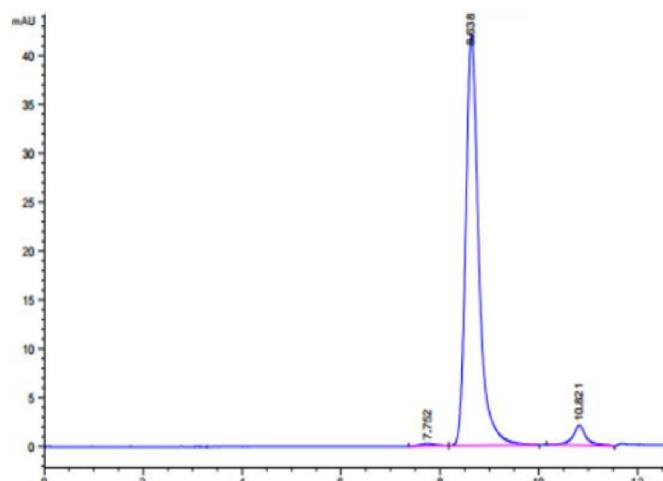
Assay Data

Bis-Tris PAGE



Human IDH1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



The purity of Human IDH1 is greater than 95% as determined by SEC-HPLC.