Datasheet for ABIN7273421

IDH1 Protein (Arg132Cys-Mutant) (His tag)

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Overview

Quantity:	100 µg
Target:	IDH1
Protein Characteristics:	Arg132Cys-Mutant
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This IDH1 protein is labelled with His tag.

Product Details

Purpose:	Human IDH1 (R132C) Protein, His Tag (MALS verified)
Sequence:	Met 1 - Leu 414
Characteristics:	Human IDH1 (R132C), His Tag (ID1-H51H8) is expressed from E.coli cells. It contains AA Met 1 - Leu 414 (Accession # O75874-1(R132C).
Purity:	>95 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.
Grade:	MALS verified

Target Details

Target:	IDH1
Alternative Name:	IDH1 (IDH1 Products)

Target Details

Background:	Synonyms:IDH1,PICD,IDP,Description:The IDH enzymes catalyze the oxidative decarboxylation of isocitrate to alpha-ketoglutarate (α-KG), producing nicotinamide adenine dinucleotide phosphate (NADPH) in the process via the citric acid cycle. Eukaryotic cells express two distinct classes of IDHs that utilize either NAD or NADP as their cofactors and serve diverse biological functions. NAD-dependent IDH is localized to the mitochondrial matrix and is well known for its central role for energy production in the Krebs cycle. NADP-dependent IDHs are primarily located either in mitochondria or cytoplasm . Each NADP-dependent isozyme is a homodimer. Mutations of Arg132 of human IDH1 result in a reduced ability of the enzyme to convert isocitrate to alpha -ketoglutarate, but the enzyme acquires the ability to generate 2-hydroxyglutarate (2HG) from alpha-ketoglutarate,2-HG is elevated in several tumor types, including a subset of AMLs.
Molecular Weight:	48.5 kDa
Pathways:	Warburg Effect

Application Details

Application Notes:	This protein carries a polyhistidine tag at the C-terminus. The protein has a calculated MW of 48.5 kDa. The protein migrates as 47-50 kDa under reducing (R) condition due to glycosylation.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	50 mM Tris, 150 mM NaCl, 1 mM TCEP, pH 7.5
Storage:	-80 °C
Storage Comment:	-70°C