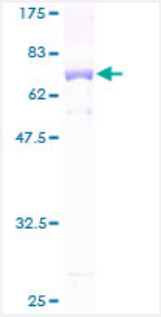
Full-Length

IDH3G (Human) Recombinant Protein (P01)

Catalog # H00003421-P01 Size 25 ug, 10 ug

Applications



Specification

Product Description	Human IDH3G full-length ORF (AAH00933, 1 a.a. - 393 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	MALKVATVAGSAAKAVLGPALLCRPWEVLGAHEVPSRNIFSEQTIPPSAKYGGRHTVTMIPGDGIG PELMLHVKSVFRHACVPVDFEEVHVSSNADEEDIRNAIMAIRRNRVALKGNIETNHNLPPSHKSRN NILRTSLDLYANVIHCKSLPGVVTRHKDIDILIVRENTEGEYSSLEHESVAGVVESLKIITKAKSLRIAE YAFKLAQESGRKKVTAVHKANIMKLGDGLFLQCCREVAARYPQITFENMIVDNTTMQLVSRPQQF DVMVMPNLYGNIVNNVCAGLVGGPGLVAGANYGHVYAVFETATRNTGKSIANKNIANPTATLLASC MMLDHLKLHSYAASIRKAVLASMDNENMHTPDIGGQGTTSEAIQDVIRHIRVINGRAVEA
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	68.97
Preparation Method	*in vitro* wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — IDH3G

Entrez GeneID	3421
GeneBank Accession#	BC000933
Protein Accession#	AAH00933
Gene Name	IDH3G
Gene Alias	H-IDHG
Gene Description	isocitrate dehydrogenase 3 (NAD+) gamma
Omim ID	300089
Gene Ontology	Hyperlink
Gene Summary	Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. These enzymes belong to two distinct subclasses, one of which utilizes NAD(+) as the electron acceptor and the other NADP(+). Five isocitrate dehydrogenases have been reported: three NAD(+)-dependent isocitrate dehydrogenases, which localize to the mitochondrial matrix, and two NADP(+)-dependent isocitrate dehydrogenases, one of which is mitochondrial and the other predominantly cytosolic. NAD(+)-dependent isocitrate dehydrogenases catalyze the allosterically regulated rate-limiting step of the tricarboxylic acid cycle. Each isozyme is a heterotetramer that is composed of two alpha subunits, one beta subunit, and one gamma subunit. The protein encoded by this gene is the gamma subunit of one isozyme of NAD(+)-dependent isocitrate dehydrogenase. This gene is a candidate gene for periventricular heterotopia. Several alternatively spliced transcript variants of this gene have been described, but only some of their full length natures have been determined. [provided by RefSeq

Other Designations	IDH-gamma|NAD (H)-specific isocitrate dehydrogenase gamma subunit|NAD+-specific ICDH|OTTHUMP00000025985|isocitrate dehydrogenase, NAD(+)-specific, mitochondrial, gamma subunit |isocitric dehydrogenase

Pathway

- Biosynthesis of alkaloids derived from histidine and purine
- Biosynthesis of alkaloids derived from ornithine
- Biosynthesis of alkaloids derived from shikimate pathway
- Biosynthesis of alkaloids derived from terpenoid and polyketide
- Biosynthesis of plant hormones
- Biosynthesis of terpenoids and steroids
- Citrate cycle (TCA cycle)
- Metabolic pathways