

## Recombinant Human OGDH protein, His-tagged

**Cat. No.** OGDH-26H    **Lot. No.** (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human OGDH(Ala256~Lys582) fused with His tag at N-terminal was expressed in E. coli.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	Ala256~Lys582
<b>Description</b>	This gene encodes one subunit of the 2-oxoglutarate dehydrogenase complex. This complex catalyzes the overall conversion of 2-oxoglutarate (alpha-ketoglutarate) to succinyl-CoA and CO <sub>2</sub> during the Krebs cycle. The protein is located in the mitochondrial matrix and uses thiamine pyrophosphate as a cofactor. A congenital deficiency in 2-oxoglutarate dehydrogenase activity is believed to lead to hypotonia, metabolic acidosis, and hyperlactatemia. Alternative splicing results in multiple transcript variants encoding distinct isoforms.
<b>Form</b>	PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
<b>Molecular Mass</b>	41.0kDa
<b>Endotoxin</b>	<1.0EU per 1g (determined by the LAL method)
<b>Purity</b>	> 90%

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<b>Applications</b>	SDS-PAGE; WB; ELISA; IP.
<b>Stability</b>	The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 centigrade for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.
<b>Storage</b>	Avoid repeated freeze/thaw cycles. Store at 2-8 centigrade for one month. Aliquot and store at -80 centigrade for 12 months.
<b>Reconstitution</b>	Reconstitute in PBS or others.

## GENE INFORMATION

<b>Gene Name</b>	OGDH oxoglutarate (alpha-ketoglutarate) dehydrogenase (lipoamide) [ Homo sapiens ]
<b>Official Symbol</b>	OGDH
<b>Synonyms</b>	OGDH; oxoglutarate (alpha-ketoglutarate) dehydrogenase (lipoamide); 2-oxoglutarate dehydrogenase, mitochondrial; E1k; OGDC-E1; oxoglutarate decarboxylase; 2-oxoglutarate dehydrogenase complex component E1; oxoglutarate dehydrogenase (succinyl-transferring); OGDC; AKGDH;
<b>Gene ID</b>	4967
<b>mRNA Refseq</b>	NM_001003941
<b>Protein Refseq</b>	NP_001003941
<b>MIM</b>	613022

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<b>UniProt ID</b>	Q02218
<b>Chromosome Location</b>	7p13-p11.2
<b>Pathway</b>	2-ketoglutarate dehydrogenase complex, organism-specific biosystem; 2-ketoglutarate dehydrogenase complex, conserved biosystem; Citrate cycle (TCA cycle), organism-specific biosystem; Citrate cycle (TCA cycle), conserved biosystem; Citrate cycle, second carbon oxidation, 2-oxoglutarate => oxaloacetate, organism-specific biosystem; Citrate cycle, second carbon oxidation, 2-oxoglutarate =>
<b>Function</b>	oxidoreductase activity; oxoglutarate dehydrogenase (NAD+) activity; oxoglutarate dehydrogenase (succinyl-transferring) activity; oxoglutarate dehydrogenase (succinyl-transferring) activity; thiamine pyrophosphate binding;

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