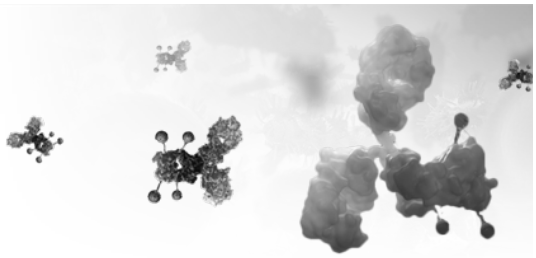

Recombinant E. coli Isocitrate dehydrogenase [His] (DAG2470)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Recombinant E.coli IdhA protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Species	E. coli
Purity	> 95% by SDS-PAGE
Conjugate	His
Applications	SDS-PAGE
Format	Liquid
Concentration	1.0 mg/ml
Buffer	In 20 mM Tris-HCl buffer, pH8.0, 10% glycerol, 100mM NaCl
Preservative	None
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.

BACKGROUND

Introduction	Isocitrate dehydrogenase (EC 1.1.1.42) and (EC 1.1.1.41), also known as IDH, is an enzyme that participates in the citric acid cycle. It catalyzes the third step of the cycle: the oxidative decarboxylation of isocitrate, producing alpha-ketoglutarate (α-ketoglutarate) and CO2 while converting NAD+ to NADH. This is a two-step process, which involves oxidation of isocitrate (a secondary alcohol) to oxalosuccinate (a ketone), followed by the decarboxylation of the carboxyl group beta to the ketone, forming alpha-ketoglutarate. Another isoform of the enzyme

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	catalyzes the same reaction, however this reaction is unrelated to the citric acid cycle, is carried out in the cytosol as well as the mitochondrion and peroxisome and uses NADP+ as a cofactor instead of NAD+.
Keywords	E. coli; E. coli Isocitrate dehydrogenase

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