DBT Protein, Human (sf9, His)

Cat. No.:	HY-P74207
Synonyms:	Lipoamide acyltransferase component of branched-chain alpha-keto acid dehydrogenase complex; BCKAD-E2; DBT
Species:	Human
Source:	Sf9 insect cells
Accession:	P11182 (G62-K482)
Gene ID:	1629
Molecular Weight:	Approximately 48.8 kDa

PROPERTIES

Biological Activity	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of 20 mM Tris, pH 8.0, 200 mM NaCl, 20% Glycerol. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	The DBT protein, an integral part of the branched-chain alpha-keto dehydrogenase complex, plays a pivotal role in catalyzing the comprehensive conversion of alpha-keto acids to acyl-CoA and CO(2). This complex comprises multiple copies of three distinct enzymatic components: branched-chain alpha-keto acid decarboxylase (E1), lipoamide acyltransferase (E2), and lipoamide dehydrogenase (E3). Specifically, within this intricate assembly, the catalytic function of the DBT enzyme involves the acceptance and subsequent transfer to coenzyme A of acyl groups generated by the branched-chain alpha-keto acid decarboxylase component. This enzymatic cascade underscores the essential contribution of DBT in mediating a key step in the metabolic pathway, facilitating the conversion of alpha-keto acids to biologically relevant acyl-CoA molecules.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA