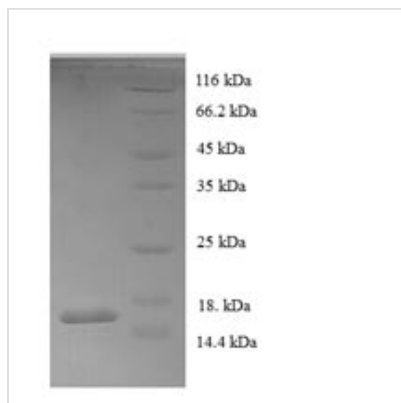




Recombinant Human Acyl-CoA-binding protein (DBI)

Product Code	CSB-EP006519HU
Relevance	Binds medium- and long-chain acyl-CoA esters with very high affinity and may function as an intracellular carrier of acyl-CoA esters. It is also able to displace diazepam from the benzodiazepine (BZD) recognition site located on the GABA type A receptor. It is therefore possible that this protein also acts as a neuropeptide to modulate the action of the GABA receptor.
Abbreviation	Recombinant Human DBI protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P07108
Alias	Diazepam-binding inhibitor ;DBIEndozepine ;EP
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	WGDLWLLPPASANPGTGTEAEFEKAAEEVRHLKTKPSDEEMLFIYGHYKQAT VGDINTERPGMLDFTGKAKWDAWNELKGTSKEDAMKAYINKVEELKKKYGI
Research Area	Transport
Source	E.coli
Target Names	DBI
Expression Region	2-104aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	15.7kDa
Protein Length	Full Length of Mature Protein of Isoform 2
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The expression region of this recombinant Human DBI covers amino acids 2-104. The theoretical molecular weight of the DBI protein is 15.7 kDa. The DBI protein was expressed in e.coli. The DBI gene fragment has been modified by fusing the N-terminal 6xHis tag, providing convenience in detecting and purifying the recombinant DBI protein during the following stages.

The human acyl-CoA-binding protein, also known as diazepam-binding inhibitor (DBI), is a multifunctional protein primarily located in the mitochondrial matrix. Its primary role is to bind and transport long-chain fatty acyl-CoA esters, participating in lipid metabolism and cellular energy regulation. Additionally, DBI is involved in the modulation of GABAergic neurotransmission as a neuropeptide, contributing to the regulation of neuronal activity and behavior. DBI's diverse functions extend to the regulation of steroidogenesis, cellular differentiation, and apoptosis. The intricate involvement of DBI in various cellular processes makes it a key player in maintaining metabolic and neural homeostasis, with potential implications in metabolic disorders and neurological conditions.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.