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Produktinformation



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SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

PRODUCT INFORMATION



DBI (human, recombinant)

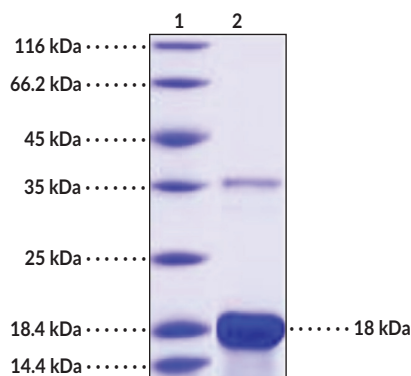
Item No. 42156

Overview and Properties

Synonyms:	ACBP, ACBD1, ACBP-1a, Acyl-CoA-binding Protein, CCK-RP, Cholecystokinin-releasing Peptide, Diazepam-binding Inhibitor, Endozepine
Source:	Recombinant human N-terminal His-tagged DBI expressed in <i>E. coli</i>
Amino Acids:	1-87 (full length)
Uniprot No.:	P07108
Molecular Weight:	14 kDa
Storage:	-80°C (as supplied)
Stability:	≥1 year
Purity:	≥95% estimated by SDS-PAGE
Supplied in:	Lyophilized from sterile PBS, pH 7.4
Protein	
Concentration:	<i>batch specific</i> mg/ml

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Image



Lane 1: MW Markers
Lane 2: DBI

SDS-PAGE Analysis of DBI. This protein has a calculated molecular weight of 14 kDa. It migrates as an approximately 18 kDa band in SDS-PAGE under reducing conditions.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM

PRODUCT INFORMATION



Description

Diazepam-binding inhibitor (DBI), also known as acyl-CoA-binding protein 1a (ACBP-1a), is a lipid-binding protein and ligand of the mitochondrial benzodiazepine receptor.¹⁻³ It is composed of an ACBP domain, which binds saturated and unsaturated medium- and long-chain acyl-CoAs.^{1,2,4} DBI undergoes extensive alternative splicing, is ubiquitously expressed, and localizes to the nucleus, cytoplasm, endoplasmic reticulum, and Golgi.⁵⁻⁷ It is involved in acyl-CoA transport and autophagy, and its expression is regulated by peroxisome proliferator-activated receptor γ (PPAR γ) and sterol regulatory element binding proteins (SREBPs).^{4,5,8,9} Recombinant DBI reduces fatty acid oxidation and glycemia and increases food intake in mice.⁸ Plasma levels of DBI are decreased in patients with anorexia nervosa and increased in patients with obesity. The SNP variant DBI^{V88M} is associated with anxiety with panic attacks.¹⁰ Cayman's DBI (human, recombinant) protein consists of 122 amino acids and has a calculated molecular weight of 14 kDa. It migrates as an approximately 18 kDa band in SDS-PAGE under reducing conditions.

References

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CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM