

Product datasheet for RC229562

OriGene Technologies, Inc.

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Diazepam Binding Inhibitor (DBI) (NM_001178041) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Diazepam Binding Inhibitor (DBI) (NM 001178041) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: DBI

Synonyms: ACBD1; ACBP; CCK-RP; EP

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >RC229562 representing NM_001178041
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

CAACAAGTAGAAGAGCTAAAGAAAAAATACGGGATA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC229562 representing NM_001178041

Red=Cloning site Green=Tags(s)

MSQHRAGRRGGVGKRGVRGRELGGQGKYGAGCSECGTRRIAARGEAEFEKAAEEVRHLKTKPSDEEMLFI

YGHYKQATVGDINTERPGMLDFTGKAKWDAWNELKGTSKEDAMKAYINKVEELKKKYGI

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

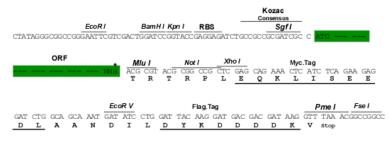
Restriction Sites: Sgfl-Mlul





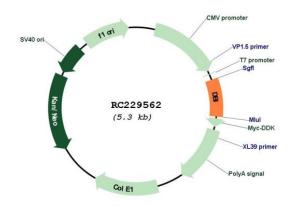
Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001178041

ORF Size: 387 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info



Diazepam Binding Inhibitor (DBI) (NM_001178041) Human Tagged ORF Clone - RC229562

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 001178041.3</u>

 RefSeq ORF:
 390 bp

 Locus ID:
 1622

 UniProt ID:
 P07108

 Cytogenetics:
 2q14.2

Protein Families: Druggable Genome

Protein Pathways: PPAR signaling pathway

MW: 14.8 kDa

Gene Summary: This gene encodes diazepam binding inhibitor, a protein that is regulated by hormones and is

involved in lipid metabolism and the displacement of beta-carbolines and benzodiazepines, which modulate signal transduction at type A gamma-aminobutyric acid receptors located in brain synapses. The protein is conserved from yeast to mammals, with the most highly conserved domain consisting of seven contiguous residues that constitute the hydrophobic binding site for medium- and long-chain acyl-Coenzyme A esters. Diazepam binding inhibitor

is also known to mediate the feedback regulation of pancreatic secretion and the

postprandial release of cholecystokinin, in addition to its role as a mediator in corticotropindependent adrenal steroidogenesis. Three pseudogenes located on chromosomes 6, 8 and 16 have been identified. Multiple transcript variants encoding different isoforms have been

described for this gene. [provided by RefSeq, Jul 2008]