

## Product datasheet for **SC108851**

### Diazepam Binding Inhibitor (DBI) (NM\_020548) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Diazepam Binding Inhibitor (DBI) (NM_020548) Human Untagged Clone
Tag:	Tag Free
Symbol:	Diazepam Binding Inhibitor
Synonyms:	ACBD1; ACBP; CCK-RP; EP
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC108851 sequence for NM_020548 edited (data generated by NextGen Sequencing)

```
ATGTGGGGCGACCTCTGGCTCCTCCCGCCTGCCTCTGCCAATCCGGGCACTGGGACAGAG
GCTGAGTTTGAGAAAGCTGCAGAGGAGGTTAGGCACCTTAAGACCAAGCCATCGGATGAG
GAGATGCTGTTTCTATGGCCACTACAACAAGCAACTGTGGGCGACATAAATACAGAA
CGGCCCGGATGTTGGACTTCACGGGCAAGGCCAAGTGGGATGCCTGGAATGAGCTGAAA
GGGACTTCCAAGGAAGATGCCATGAAAGCTTACATCAACAAGTAGAAGAGCTAAAGAAA
AAATACGGGATATGA
```

Clone variation with respect to NM\_020548.6

#### 5' Read Nucleotide Sequence:

```
>OriGene 5' read for NM_020548 unedited
AGAATTTTGTAAACGACTCACTATAGGGCGGCCGCGATTTCGGCACGAGGCTCAGTGTA
GACCCCTTGTCTGAGACCGAGCTATGTGGGGCGACCTCTGGCTCCTCCCGCCTGCCTCTGC
CAATCCGGGCACTGGGACAGAGGCTGAGTTTGAGAAAGCTGCAGAGGAGGTTAGGCACCT
TAAGACCAAGCCATCGGATGAGGAGATGCTGTTTCTATGGCCACTACAACAAGCAAC
TGTGGGCGACATAAATACAGAACGGCCCGGATGTTGGACTTCACGGGCAAGGCCAAGTG
GGATGCCTGGAATGAGCTGAAAGGGACTTCCAAGGAAGATGCCATGAAAGCTTACATCAA
CAAAGTAGAAGAGCTAAAGAAAAAATACGGGATATGAGAGACTGGATTTGGTTACTGTGC
CATGTGTTTATCCTAAACTGAGACAATGCCTTGTTTTTTCTAATACCGTGGATGGTGGG
AATTCGGGAAAATAACCAGTTAAACCAGCTACTCAAGGCTGCTCACCATACGGCTCTAAC
AGATTAGGGGCTAAAACGATTACTGACTTTCCTTGAGTAGTTTTATCTGAAATCAATTA
AAAGTGTATTTGTTACTTCAAAAAAAAAAAAAAAAAACTCGACTCTAGATTGCGGCCGCGG
TCATAGCTGTTTCTGAACAGATCCCGGNTGGCATCCCTGTGACCCCTCCCAAGTGCCTC
TCCTGGCCCTGGAAGTTGCCACTCCAGTGCCCACCAGCCTTGCTTAATAAAAATTAAGTG
CATCATTTTGTCTGACTAGGTGTCCTTCTAATATTATGGGTGGAAGGGGGTGGGATTTG
GAACAGGGGCCAGTTGGGAAAACACCT
```



[View online »](#)

<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_020548 unedited CAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTGAAGTAACAAATACACTTTTAATTGAT TTCAGATAAAAACTACTCAAGGAAAGTCAGTAATCGTTTTAGCCCCTAATCTGTTAGAGC CGTATGGTGAGCAGCCTTGAGTAGCTGGTTAACTGGTTATTTTCCCGAATCCCACCAT CCACGGTATTAGAAAAACAAGGCATTGTCTCAGTTAAGATAAACACATGGCACAGTA ACCAAATCCAGTCTCTCATATCCCGTATTTTTCTTTAGCTCTTCTACTTTGTTGATGTA AGCTTTCATGGCATCTTCCTTGGAAAGTCCCTTTCAGCTCATTCCAGGCATCCCACCTGGC CTTGCCCGTGAAGTCCAACATCCCGGGCGTTCTGTATTTATGTGCGCCACAGTTGCTTG TTTGATAGTGCCATAGATGAACAGCATCTCCTCATCCGATGGCTTGGTCTTAAAGTGCTT AACCTCCTCTGCAGCTTTCTCAAACCTCAGCCTCTGTTCCCACTGCCCGATTGGCACAAG CATCCGGCAAGACTCACACGTCCACCCCATACCCTCGGCCTAACCATGTCTTCACTGAAC CTCTCCCAATTCGCCGCCCTTTATCGCTCCTTCCAATTTCTGCCGGTTTCCCTAAC CATCTCTATTATACTCCACTCCCCCCCCCTCCACCATGTTCTTTCCCTTCCTCGTTTC CCTTCTCTCCCCCAACCCCTATATATCCTCTCTCATTCTCCCTCCTCACTTCT CTCTCCCTCCTACTTTTGTTCCTTACCCCTCCCACACCCTTCTTCTCCACACCTA TCCTTTCGCCCTTCTCCCCCCTCCCTTTTCCCCCCCCCCCCACCTCCCTGCT ATATTTAATTCACCGCCAGACCACCAACCCTACATTACTCCACCTTCTCTCACCTC TCCACACACCCCCCN
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_020548
<b>Insert Size:</b>	650 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_020548.4</a></u> , <u><a href="#">NP_065438.1</a></u>
<b>RefSeq Size:</b>	730 bp
<b>RefSeq ORF:</b>	315 bp
<b>Locus ID:</b>	1622
<b>UniProt ID:</b>	<u><a href="#">P07108</a></u>
<b>Cytogenetics:</b>	2q14.2
<b>Domains:</b>	ACBP

**Protein Families:** Druggable Genome

**Protein Pathways:** PPAR signaling pathway

**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 corticotropin-dependent 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]

Transcript Variant: This variant (1, also known as 1b) has an alternate splice site and an alternate exon in the 5' region, which results in an alternate translation start codon, as compared to variant 5. The resulting isoform (1) has a shorter and distinct N-terminus, compared to isoform 5. Variants 1, 7, 8, 9 and 10 encode the same isoform 1.