

# Datasheet for ABIN4886558 anti-Diazepam Binding Inhibitor antibody (AA 2-87)





Overview

| Quantity:                   | 100 µg  |
|-----------------------------|---|
| Target:                     | Diazepam Binding Inhibitor (DBI)  |
| Binding Specificity:        | AA 2-87   |
| Reactivity:                 | Human   |
| Host:                       | Rabbit  |
| Clonality:                  | Polyclonal  |
| Conjugate:                  | This Diazepam Binding Inhibitor antibody is un-conjugated   |
| Application:                | Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))  |
| Product Details             |   |
| Purpose:                    | Rabbit IgG polyclonal antibody for Acyl-CoA-binding protein(DBI) detection. Tested with WB, IHC-P in Human.   |
| Immunogen:                  | E. coli-derived human DBI recombinant protein (Position: S2-I87). Human DBI shares 77.9% amino acid (aa) sequence identity with both mouse and rat DBI. |
| Isotype:                    | IgG   |
| Cross-Reactivity (Details): | No cross reactivity with other proteins.  |
| Characteristics:            | Rabbit IgG polyclonal antibody for Acyl-CoA-binding protein(DBI) detection. Tested with WB, IHC-P in Human.   |
|                             | Gene Name: diazepam binding inhibitor, acyl-CoA binding protein<br>Protein Name: Acyl-CoA-binding protein   |
| Purification:               |   |

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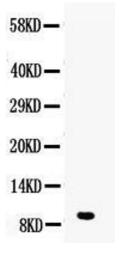
| Target:  | Diazepam Binding Inhibitor (DBI)  |
|--|---|
| Alternative Name:  | DBI (DBI Products)  |
| Background:  | Acyl-CoA-binding protein is a protein that in humans is encoded by the DBI gene. This gene  |
|  | encodes diazepam binding inhibitor, a protein that is regulated by hormones and is 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.   |
|  |   |
|  | Synonyms: ACBD 1   ACBD1   ACBP   CCK RP   CCKRP   DBI   Endozepine   EP   P07108   |
| Gene ID:   | 1622  |
| UniProt:   | P07108  |
|  |   |
| Application Details  |   |
|  | WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human   |
|  | WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human<br>IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Epitope Retrieval by Heat: Boiling   |
|  |   |
|  | IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Epitope Retrieval by Heat: Boiling  |
|  | IHC-P: Concentration: 0.5-1 $\mu$ g/mL, Tested Species: Human, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of  |
|  | IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections.   |
| Application Notes:   | <ul> <li>IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections.</li> <li>Notes: Tested Species: Species with positive results. Other applications have not been tested.</li> </ul>   |
| Application Notes:   | <ul> <li>IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections.</li> <li>Notes: Tested Species: Species with positive results. Other applications have not been tested.</li> <li>Optimal dilutions should be determined by end users.</li> </ul>   |
| Application Notes:<br>Comment:   | <ul> <li>IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections.</li> <li>Notes: Tested Species: Species with positive results. Other applications have not been tested. Optimal dilutions should be determined by end users.</li> <li>Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by</li> </ul>                       |
| Application Details<br>Application Notes:<br>Comment:<br>Restrictions: | <ul> <li>IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections.</li> <li>Notes: Tested Species: Species with positive results. Other applications have not been tested. Optimal dilutions should be determined by end users.</li> <li>Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).</li> </ul> |

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## Handling

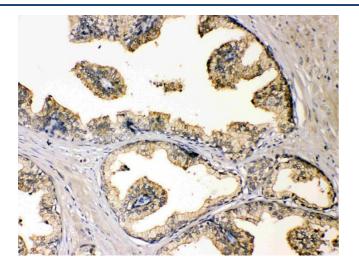
| Reconstitution:    | Add 0.2 mL of distilled water will yield a concentration of 500 $\mu$ g/mL.  |
|--------------------|--|
| Concentration:     | 500 μg/mL  |
| Buffer:            | Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.  |
| Preservative:      | Sodium azide   |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |
| Handling Advice:   | Avoid repeated freezing and thawing.   |
| Storage:           | 4 °C/-20 °C  |
| Storage Comment:   | At -20°C for one year. After reconstitution, at 4°C for one month.   |
|                    | It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.          |

#### Images



#### Western Blotting

Image 1. Western blot analysis of DBI using anti-DBI antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: human placenta tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-DBI antigen affinity purified polyclonal antibody (Catalog #) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for DBI at approximately 10KD. The expected band size for DBI is at 10KD.

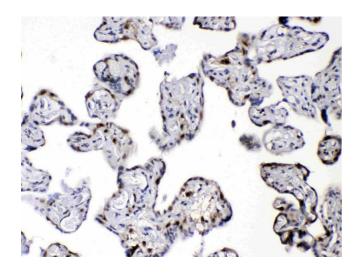


### Immunohistochemistry

**Image 2.** IHC analysis of DBI using anti-DBI antibody . DBI was detected in paraffin-embedded section of human prostatic cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-DBI Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

## Immunohistochemistry

**Image 3.** IHC analysis of DBI using anti-DBI antibody . DBI was detected in paraffin-embedded section of human placenta tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-DBI Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



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