

Anti-DBI Picoband Antibody

Catalog # ABO10170

Product Information

Application	WB, IHC-P
Primary Accession	P07108
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Acyl-CoA-binding protein(DBI) detection. Tested with WB, IHC-P in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	1622
Other Names	Acyl-CoA-binding protein, ACBP, Diazepam-binding inhibitor, DBI, Endozepine, EP, DBI
Calculated MW	10044
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat Western blot, 0.1-0.5 µg/ml, Human
Subcellular Localization	Endoplasmic reticulum . Golgi apparatus . Golgi localization is dependent on ligand binding (PubMed:17953517). .
Tissue Specificity	Isoform 1 is ubiquitous, with a moderate expression level. Isoform 2 is ubiquitous with high level in liver and adipose tissue. Isoform 3 is ubiquitous with strong expression in adipose tissue and heart. .
Source	Eukaryota
Protein Name	Acyl-CoA-binding protein
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
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.
Purification	Immunogen affinity purified.

Cross Reactivity	No cross reactivity with other proteins
Storage	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.

Protein Information

Name	DBI
Function	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.
Cellular Location	Endoplasmic reticulum. Golgi apparatus Note=Golgi localization is dependent on ligand binding (PubMed:17953517).
Tissue Location	Isoform 1 is ubiquitous, with a moderate expression level. Isoform 2 is ubiquitous with high level in liver and adipose tissue. Isoform 3 is ubiquitous with strong expression in adipose tissue and heart.

Background

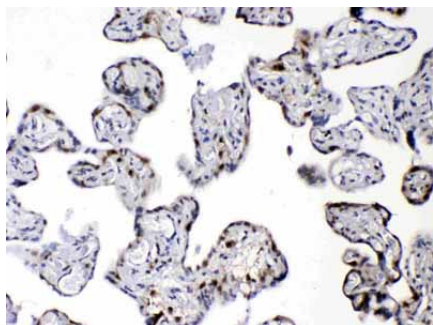
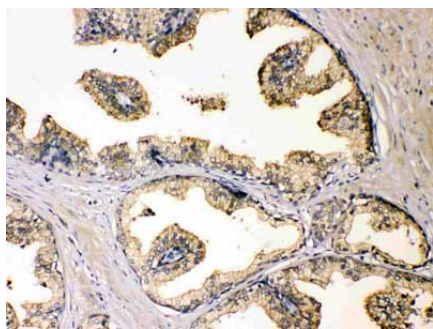
Acyl-CoA-binding protein is a protein that in humans is encoded by the DBI gene. This gene encodes diazepam binding inhibitor, a protein that is regulated by hormones and is involved in lipid metabolism and the displacement of beta-carbolines and benzodiazepines, which modulate signal transduction at 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.

Images



Western blot analysis of DBI expression in human placenta extract (lane 1). DBI at 10KD was detected using rabbit anti- DBI Antigen Affinity purified polyclonal antibody (Catalog # ABO10170) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .

DBI was detected in paraffin-embedded sections of human prostatic cancer tissues using rabbit anti- DBI Antigen Affinity purified polyclonal antibody (Catalog #ABO10170) at 1 µg/mL. The immunohistochemical section was developed using SABC method .



DBI was detected in paraffin-embedded sections of human placenta tissues using rabbit anti- DBI Antigen Affinity purified polyclonal antibody (Catalog #ABO10170) at 1 μ g/mL. The immunohistochemical section was developed using SABC method .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.