

## **ABAT Antibody (Center) Blocking peptide**

Synthetic peptide Catalog # BP5316c

### **Specification**

## **ABAT Antibody (Center) Blocking peptide - Product Information**

Primary Accession P80404
Other Accession NP\_065737.2

## ABAT Antibody (Center) Blocking peptide - Additional Information

#### Gene ID 18

#### **Other Names**

4-aminobutyrate aminotransferase, mitochondrial, (S)-3-amino-2-methylpropionate transaminase, GABA aminotransferase, GABA-AT, Gamma-amino-N-butyrate transaminase, GABA transaminase, GABA-T, L-AIBAT, ABAT, GABAT

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

## **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

#### ABAT Antibody (Center) Blocking peptide - Protein Information

Name ABAT (HGNC:23)

**Synonyms** GABAT

#### **Function**

Catalyzes the conversion of gamma-aminobutyrate and L-beta- aminoisobutyrate to succinate semialdehyde and methylmalonate semialdehyde, respectively (PubMed:<a href="http://www.uniprot.org/citations/10407778" target="\_blank">10407778</a>, PubMed:<a href="http://www.uniprot.org/citations/15528998" target="\_blank">15528998</a>). Can also convert delta-aminovalerate and beta-alanine (By similarity).

#### **Cellular Location**

Mitochondrion matrix.

### **Tissue Location**

Liver > pancreas > brain > kidney > heart > placenta.



## **ABAT Antibody (Center) Blocking peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

#### • Blocking Peptides

## **ABAT Antibody (Center) Blocking peptide - Images**

# ABAT Antibody (Center) Blocking peptide - Background

4-aminobutyrate aminotransferase (ABAT) is responsible for catabolism of gamma-aminobutyric acid (GABA), an important, mostly inhibitory neurotransmitter in the central nervous system, into succinic semialdehyde. The active enzyme is a homodimer of 50-kD subunits complexed to pyridoxal-5-phosphate. The protein sequence is over 95% similar to the pig protein. GABA is estimated to be present in nearly one-third of human synapses. ABAT in liver and brain is controlled by 2 codominant alleles with a frequency in a Caucasian population of 0.56 and 0.44. The ABAT deficiency phenotype includes psychomotor retardation, hypotonia, hyperreflexia, lethargy, refractory seizures, and EEG abnormalities.

# **ABAT Antibody (Center) Blocking peptide - References**

Chakrabarti, B., et al. Autism Res 2(3):157-177(2009)Inada, T., et al. Pharmacogenet. Genomics 18(4):317-323(2008)Wu, C., et al. Proteomics 7(11):1775-1785(2007)