

Datasheet for ABIN4886408
anti-ABAT antibody (AA 388-500)



[Go to Product page](#)

1 Image

Overview

Quantity:	100 µg
Target:	ABAT
Binding Specificity:	AA 388-500
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ABAT antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunocytochemistry (ICC), Flow Cytometry (FACS)

Product Details

Purpose:	Anti-ABAT Antibody Picoband®
Immunogen:	E. coli-derived human ABAT recombinant protein (Position: K388-K500). Human ABAT shares 93.9% and 94.5% amino acid (aa) sequence identity with mouse and rat ABAT, respectively.
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-ABAT Antibody Picoband® (ABIN4886408). Tested in Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

Product Details

Purification: Immunogen affinity purified.

Target Details

Target: ABAT

Alternative Name: ABAT ([ABAT Products](#))

Background: Synonyms: 4-aminobutyrate aminotransferase, mitochondrial, 2.6.1.19, (S)-3-amino-2-methylpropionate transaminase, 2.6.1.22, GABA aminotransferase, GABA-AT, Gamma-amino-N-butyrate transaminase, GABA transaminase, GABA-T, L-AIBAT, ABAT, GABAT, Tissue Specificity: Liver > pancreas > brain > kidney > heart > placenta.

Background: 4-Aminobutyrate aminotransferase is a protein that in humans is encoded by the ABAT gene. 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. Multiple alternatively spliced transcript variants encoding the same protein isoform have been found for this gene.

Sequence Similarities: Belongs to the transient receptor (TC 1.A.4) family. STpC subfamily. TRPC4 sub-subfamily.

Molecular Weight: 54 kDa

Gene ID: 18

UniProt: [P80404](#)

Pathways: [Monocarboxylic Acid Catabolic Process](#)

Application Details

Application Notes: Western blot, 0.1-0.5 µg/mL, Human, Mouse, Rat

Immunocytochemistry/Immunofluorescence, 5 µg/mL, Human

Flow Cytometry (Fixed), 1-3 µg/1×10⁶ cells, Human

1. De Biase D, Barra D, Simmaco M, John RA, Bossa F (Jan 1995). "Primary structure and tissue distribution of human 4-aminobutyrate aminotransferase". European Journal of Biochemistry / FEBS 227 (1-2): 476-80. 2. Medina-Kauwe LK, Tobin AJ, De Meirleir L, Jaeken J, Jakobs C,

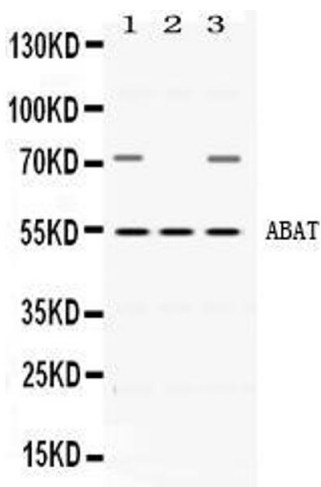
Application Details

	Nyhan WL, Gibson KM (Jun 1999). "4-Aminobutyrate aminotransferase (GABA-transaminase) deficiency".Journal of Inherited Metabolic Disease 22 (4): 414-27.
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/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:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

Images



Western Blotting

Image 1. Western blot analysis of ABAT expression in rat brain extract (Lane 1), mouse testis extract (Lane 2) and HEPG2 whole cell lysates (Lane 3). ABAT at 54KD was detected using rabbit anti- ABAT Antigen Affinity purified polyclonal antibody (Catalog #) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method (Catalog # EK1002).