Product datasheet
Anti-ABAT Antibody
Catalog Number: *PB1071*

BOSTER
antibody and ELISA experts
BOSTER BIOLOGICAL TECHNOLOGY
Building C21, 3rd and 4th floors, Optics Valley Biomedical Accelerator,
Wuhan East Lake High-tech Development Zone
Web: www.boster.com *Phone:* 027-67845390 *Email:* boster@boster.com

Basic Information

Product Name	Anti-ABAT Antibody
Gene Name	ABAT
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, ICC/IF, FCM
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.
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.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	54 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 ICC/IF: 1:50-1:200 Flow Cytometry (Fixed):1:50-200

Storage

12 months from date of receipt，-20℃ as supplied. 6 months 2 to 8℃ after reconstitution. Avoid repeated freezing and thawing.

Background Information

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 humans ynapses. 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, refractoryseizures, and EEG abnormalities. Multiple alternatively spliced transcript variants encoding the same protein isoform have been found for this gene.
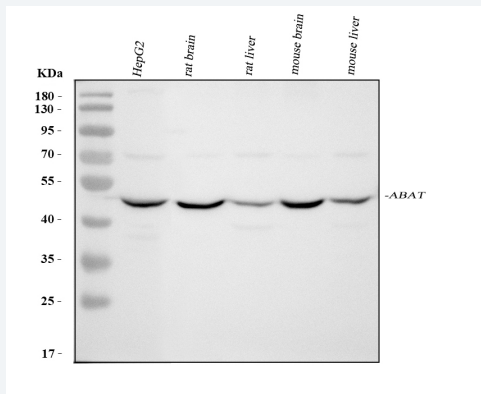
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Selected Validation Data

Figure 1. Western blot analysis of anti- ABAT antibody (PB1071). The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: HepG2 whole cell lysates,
Lane 2: rat brain tissue lysates,
Lane 3: rat liver tissue lysates,
Lane 4: mouse brain tissue lysates,
Lane 5: mouse liver tissue lysates.
Use rabbit anti- ABAT 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for ABAT at approximately 54KD. The expected band size for ABAT is at 54KD.
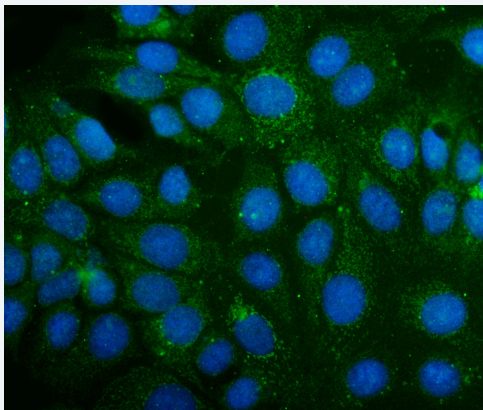

Figure 2. ICC analysis using anti-ABAT antibody (PB1071). was detected in immersion fixed MCF-7 cell line. Cells were stained using the Dylight488-conjugated Anti-rabbit IgG Secondary Antibody (green)(Catalog # BA1127) and counterstained with DAPI (blue).
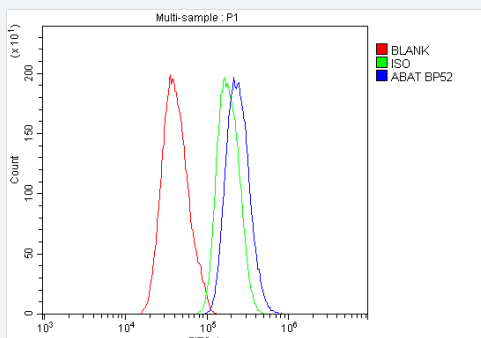

Figure 3. Flow Cytometry analysis of Caco-2 cells using anti-ABAT antibody (PB1071).
Overlay histogram showing Caco-2 cells stained with PB1071 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-ABAT Antibody (PB1071) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at

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20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.