Recombinant Human ABAT Protein, Myc/DDK-tagged, C13 and N15-labeled

Cat. No. ABAT-1795H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	ABAT MS Standard C13 and N15-labeled recombinant protein (NP_000654) with a C-terminal MYC/DDK tag, was expressed in HEK293 cells.
Species	Human
Source	HEK293
Description	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. Multiple alternatively spliced transcript variants encoding the same protein isoform have been found for this gene.
Molecular Mass	56.5 kDa
AA Sequence	MASMLLAQRLACSFQHSYRLLVPGSRHISQAAAKVDVEFDYDGPLMKTEVPGPRSR ELMKQLNIIQNAEAVHFFCNYEESRGNYLVDVDGNRMLDLYSQISSVPIGYSHPALLK

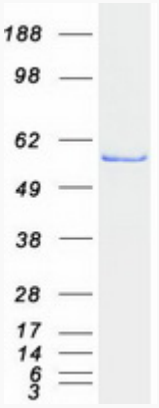
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	LIQQPQNASMFVNRPALGILPPENFVEKLRQSLLSVAPKGMSQLITMACGSCSNENA LKTIFMWYRSKERGQRGFSQEELETCMINQAPGCPDYSILSFMGAFHGRTMGCLAT THSKAIHKIDIPSFDWPIAPFPRLKYPLEEFVKENQQEEARCLEEVEDLIVKYRKKKKT VAGIIVEPIQSEGGDNHASDDFFRKLRDIARKHGCAFLVDEVQTGGGCTGKFWAHE HWGLDDPADVMTFSKKMMTGGFFHKEEFRPNAPYRIFNTWLGDPSKNLLLAEVINII KREDLLNNAAHAGKALLTGLLDLQARYPQFISRVRGRGTFCSFDTPDDSIRNKLILIA RNKGVVLGGCGDKSIRFRPTLVFRDHHAHLFLNIFSDILADFKTRTRPLEQKLISEEDL AANDILDYKDDDDKV
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining
Stability	Stable for 3 months from receipt of products under proper storage and handling conditions.
Storage	Store at -80 centigrade. Avoid repeated freeze-thaw cycles.
Concentration	50 μg/mL as determined by BCA
Storage Buffer	100 mM glycine, 25 mM Tris-HCl, pH 7.3.

GENE INFORMATION

Gene Name	ABAT 4-aminobutyrate aminotransferase [Homo sapiens (human)]
Official Symbol	ABAT
Synonyms	ABAT; 4-aminobutyrate aminotransferase; 4-aminobutyrate aminotransferase, mitochondrial; 4 aminobutyrate transaminase; GABAT; GABA transferase; GABA transaminase; GABA aminotransferase; 4-aminobutyrate transaminase; gamma-amino-N-butyrate transaminase; (S)-3-amino-2-methylpropionate transaminase; NPD009; GABA-AT; FLJ17813; FLJ30272;

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Gene ID	18
mRNA Refseq	NM_000663
Protein Refseq	NP_000654
MIM	137150
UniProt ID	P80404
SDS-PAGE	

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