

## **Product datasheet for TP318980M**

## OriGene Technologies, Inc.

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### ABAT (NM 020686) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human 4-aminobutyrate aminotransferase (ABAT), nuclear gene

encoding mitochondrial protein, transcript variant 1, 100 µg

Species: Human
Expression Host: HEK293T

**Expression cDNA Clone** >RC218980 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

**IFSDILADFK** 

MASMLLAQRLACSFQHSYRLLVPGSRHISQAAAKVDVEFDYDGPLMKTEVPGPRSRELMKQLNIIQNAEA VHFFCNYEESRGNYLVDVDGNRMLDLYSQISSVPIGYSHPALLKLIQQPQNASMFVNRPALGILPPENFV EKLRQSLLSVAPKGMSQLITMACGSCSNENALKTIFMWYRSKERGQRGFSQEELETCMINQAPGCPDYSI LSFMGAFHGRTMGCLATTHSKAIHKIDIPSFDWPIAPFPRLKYPLEEFVKENQQEEARCLEEVEDLIVKY RKKKKTVAGIIVEPIQSEGGDNHASDDFFRKLRDIARKHGCAFLVDEVQTGGGCTGKFWAHEHWGLDDPA DVMTFSKKMMTGGFFHKEEFRPNAPYRIFNTWLGDPSKNLLLAEVINIIKREDLLNNAAHAGKALLTGLL DLQARYPQFISRVRGRGTFCSFDTPDDSIRNKLILIARNKGVVLGGCGDKSIRFRPTLVFRDHHAHLFLN

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV** 

Tag: C-Myc/DDK

**Predicted MW:** 53.2 kDa

**Concentration:**  $>0.05 \mu g/\mu L$  as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.





#### ABAT (NM\_020686) Human Recombinant Protein - TP318980M

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** NP 065737

Locus ID: 18

UniProt ID: <u>P80404</u>, <u>X5D8S1</u>

RefSeq Size: 4814
Cytogenetics: 16p13.2
RefSeq ORF: 1500

Synonyms: GABA-AT; GABAT; NPD009

**Summary:** 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. [provided by RefSeq, Jul 2008]

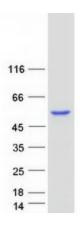
**Protein Families:** Druggable Genome

**Protein Pathways:** Alanine, aspartate and glutamate metabolism, beta-Alanine metabolism, Butanoate

metabolism, Metabolic pathways, Propanoate metabolism, Valine, leucine and isoleucine

degradation

# **Product images:**



Coomassie blue staining of purified ABAT protein (Cat# [TP318980]). The protein was produced from HEK293T cells transfected with ABAT cDNA clone (Cat# [RC218980]) using MegaTran 2.0 (Cat# [TT210002]).