

### Product datasheet for RC206793L1

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### ABAT (NM\_000663) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: ABAT (NM\_000663) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: ABAT

**Synonyms:** GABA-AT; GABAT; NPD009

Mammalian Cell None

Selection:

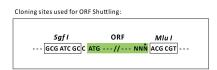
Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

**ORF Nucleotide** The ORF insert of this clone is exactly the same as(RC206793).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF.

**ACCN:** NM\_000663

ORF Size: 1500 bp

#### ABAT (NM\_000663) Human Tagged Lenti ORF Clone - RC206793L1

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

**RefSeq:** <u>NM 000663.3</u>

RefSeq Size:5586 bpRefSeq ORF:1503 bp

Locus ID: 18

 UniProt ID:
 P80404

 Cytogenetics:
 16p13.2

**Domains:** aminotran\_3

**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

**MW:** 56.5 kDa

**Gene 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

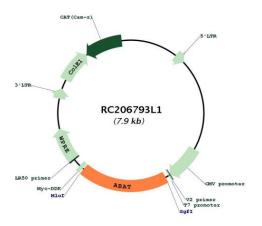
population of 0.56 and 0.44. The ABAT deficiency phenotype includes psychomotor

retardation, hypotonia, hyperreflexia, lethargy, refractory seizures, and EEG abnormalities. Multiple alternatively spliced transcript variants encoding the same protein isoform have

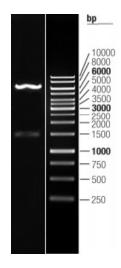
been found for this gene. [provided by RefSeq, Jul 2008]



## **Product images:**



Circular map for RC206793L1



Double digestion of RC206793L1 using Sgfl and Mlul