

Product datasheet for **TP301284**

Aminoacylase 1 (ACY1) (NM_000666) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human aminoacylase 1 (ACY1), 20 µg

Species: Human

Expression Host: HEK293T

Expression cDNA Clone or AA Sequence: >RC201284 protein sequence
Red=Cloning site **Green**=Tags(s)

MTSKGPEEEEHPSVTLFRQYLRIRTVQPKPDYGA AVAFFEETARQLGLGCQKVEVAPGYVVTWPGTNP
TLSSILLNSHTDWPVFKEHWSHDPFEAFK DSEGYIYARGAQDMKCVSIQYLEAVRRLKVEGHRFPRTIH
MTFVPDEEVGGHQGMELFVQRPEFHALRAGFALDEGIANPTDAFTVFYSERSPWWVRVTSTGRPGHASR
F
MEDTAAEKLHKVNSILAFREKEWQRLQSNPHLKEG SVTSVNLTKLEGGVAYNVIPATMSASFDFRVAPD
VDFKAFEEQLQSWCQAAGEGVTLEFAQKWMHPQVTPTDDSNPWWAAFSRVCKDMNLTLEPEIMPAAT
DNR
YIRAVGVPALGFSPMNRTPVLLHDHDERLHEAVFLRGVDIYTRLLPALASVPALPSDS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

Predicted MW: 45.7 kDa

Concentration: >0.05 µg/µL 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.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.



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RefSeq: [NP_000657](#)

Locus ID: 95

UniProt ID: [Q03154](#)

RefSeq Size: 1678

Cytogenetics: 3p21.2

RefSeq ORF: 1224

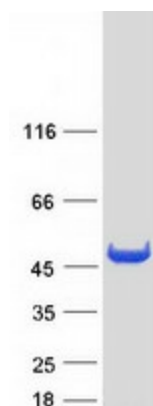
Synonyms: ACY-1; ACY1D; HEL-S-5

Summary: This gene encodes a cytosolic, homodimeric, zinc-binding enzyme that catalyzes the hydrolysis of acylated L-amino acids to L-amino acids and an acyl group, and has been postulated to function in the catabolism and salvage of acylated amino acids. This gene is located on chromosome 3p21.1, a region reduced to homozygosity in small-cell lung cancer (SCLC), and its expression has been reported to be reduced or undetectable in SCLC cell lines and tumors. The amino acid sequence of human aminoacylase-1 is highly homologous to the porcine counterpart, and this enzyme is the first member of a new family of zinc-binding enzymes. Mutations in this gene cause aminoacylase-1 deficiency, a metabolic disorder characterized by central nervous system defects and increased urinary excretion of N-acetylated amino acids. Alternative splicing of this gene results in multiple transcript variants. Read-through transcription also exists between this gene and the upstream ABHD14A (abhydrolase domain containing 14A) gene, as represented in GenelD:100526760. A related pseudogene has been identified on chromosome 18. [provided by RefSeq, Nov 2010]

Protein Families: Protease

Protein Pathways: Arginine and proline metabolism, Metabolic pathways

Product images:



Coomassie blue staining of purified ACY1 protein (Cat# TP301284). The protein was produced from HEK293T cells transfected with ACY1 cDNA clone (Cat# [RC201284]) using MegaTran 2.0 (Cat# [TT210002]).