

Product datasheet for **AR09597PU-L**

Aminoacylase-1 / ACY1 (1-408, His-tag) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Aminoacylase-1 / ACY1 (1-408, His-tag) human recombinant protein, 0.25 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	<u>MGSSHHHHHH SSGLVPRGSH</u> MTSKGPEEEH PSVTLFRQYL RIRTVQPKPD YGAAVAFFEE TARQLGLGCQ KVEVAPGYV TVLTWPGTNP TLSSILLNSH TDVVPVFEKH WSHDPFEAFK DSEGYYARG AQDMKCVSIQ YLEAVRRLKV EGHRFPRTIH MTFVPDEEVG GHQGMELFVQ RPEFHALRAG FALDEGIANP TDAFTVFYSE RSPWWWVTVS TGRPGHASRF MEDTAAEKLH KVVNSILAFR EKEWQRLQSN PHLKEGSVTS VNLTKLEGGV AYNVIPATMS ASDFRVPAD VDFKAFEEQL QSWCQAAGEG VTLEFAQKWM HPQVTPTDDS NPWWAAFSRV CKDMNLTLEP EIMPAATDNR YIRAVGVPAL GFSPMNRTPV LLHDHDERLH EAVFLRGVDI YTRLLPALAS VPALPSDS
Tag:	His-tag
Concentration:	lot specific
Purity:	>90% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 1 mM DTT
Preparation:	Liquid purified protein
Protein Description:	Recombinant human ACY1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	<u>NP_000657</u>
Locus ID:	95
UniProt ID:	<u>Q03154, V9HWA0</u>
Cytogenetics:	3p21.2
Synonyms:	ACY-1; ACY1D; HEL-S-5



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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: