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Product datasheet for TP710321

Aminoacylase 1 (ACY1) (NM_000666) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Human aminoacylase 1 (ACY1), transcript variant 1, full length, with C-terminal DDK tag, expressed in sf9, 20ug
Species:	Human
Expression Host:	Sf9
Expression cDNA Clone or AA Sequence:	A DNA sequence from TrueORF clone, RC201284, encoding human full-length ACY1
Tag:	C-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:	50 mM Tris-HCl, 100 mM glycine, pH 8.0, 10% glycerol
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.
RefSeq:	NP_000657
Locus ID:	95
UniProt ID:	Q03154, V9HWA0
RefSeq Size:	1678
Cytogenetics:	3p21.2
RefSeq ORF:	1224
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 GeneID: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: