

Product information



ACY1, 1-408aa

Human, His-tagged, Recombinant, *E.coli*

Cat. No. IBATGP0659

Full name: Aminoacylase 1

NCBI Accession No.: NP_000657

Synonyms: ACY1D, ACYLASE

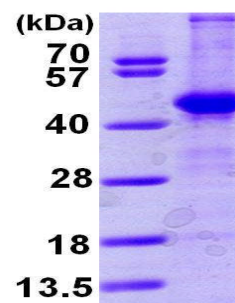
Description: Aminoacylase-1 is a cytosolic, homodimeric, zinc-binding enzyme that catalyzes the hydrolysis of acylated L-amino acids to L-amino acids and acyl group, and has been postulated to function in the catabolism and salvage of acylated amino acids. Defects in ACY1 are the cause of aminoacylase-1 deficiency (ACY1D). ACY1D results in a metabolic disorder manifesting with encephalopathy, unspecific psychomotor delay, psychomotor delay with atrophy of the vermis and syringomyelia, marked muscular hypotonia or normal clinical features. Epileptic seizures are a frequent feature. All affected individuals exhibit markedly increased urinary excretion of several N-acetylated amino acids. Recombinant human ACY1 protein, fused to His-tag at N-terminus, was expressed in *E.coli* and purified by using conventional chromatography techniques.

Form: Liquid. 20mM Tris-HCl buffer (pH8.0) containing 10% glycerol,
1mM DTT

Molecular Weight: 48.0kDa (428aa) confirmed by MALDI-TOF

Purity: > 90% by SDS - PAGE

Concentration: 0.5 mg/ml (determined by Bradford assay)



15% SDS-PAGE (3ug)

Sequences of amino acids:

MGSSHHHHH SSGLVPRGSH MTSKGPEEEH PSVTLFRQYL RIRTVQPKPD YGA AVAFFEE TARQLGLGCQ KVEVAPGYVV TVLTWPGTNP
TLSSILLNSH TDVVPVFKEH WSHDPFEAFK DSEGYIYARG AQDMKCVSIQ YLEAVRRLKV EGHFRPRTIH MTFVPDEEVG GHQGMELFVQ
RPEFHALRAG FALDEGIANP TDAFTVFYSE RSPWVVRVTS TGRPGHASRF MEDTAAEKLH KVVNSILAFR EKEWQRLQSN PHLKEGSVTS
VNLTKLEGGV AYNVIPATMS ASFDFRVAPD VDFKAFEEQL QSWCQAAGEG VTLEFAQKWM HPQVTPDDDS NPWWAAFSRV CKDMNLTLEP
EIMPAATDNR YIRAVGVPAL GFSPMNRTPV LLHDHDERLH EAVFLRGVDI YTRLLPALAS VPALPSDS

WARNING: THIS PRODUCT IS NOT INTENDED OR APPROVED FOR HUMAN, DIAGNOSTICS OR VETERINARY USE. USE OF THIS PRODUCT FOR HUMAN OR ANIMAL TESTING IS EXTREMELY HAZARDOUS AND MAY RESULT IN DISEASE, SEVERE INJURY, OR DEATH.

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General references:

Sass J.O., et al. (2006) Am. J. Hum. Genet. 78:401-409

Van Coster RN., et al. (2005) Biochem Biophys Res Commun. 338(3):1322-6

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C.
Avoid repeated freezing and thawing cycles.

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