

## Recombinant Human ACY1 Protein, His-tagged

**Cat. No.** ACY1-487H    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant Human ACY1(Thr2~Ser408) fused with His tag at N-terminal was expressed in E. coli.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>ProteinLength</b>    | Thr2~Ser408                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Description</b>      | <p>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.</p> |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                         |                                                                                                                                                                                                                                                                                                                                              |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Form</b>             | PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.                                                                                                                                                                                                                                                                      |
| <b>Molecular Mass</b>   | 49.5kDa                                                                                                                                                                                                                                                                                                                                      |
| <b>Endotoxin</b>        | <1.0EU per 1ug (determined by the LAL method)                                                                                                                                                                                                                                                                                                |
| <b>Purity</b>           | > 95%                                                                                                                                                                                                                                                                                                                                        |
| <b>Applications</b>     | Positive Control; Immunogen; SDS-PAGE; WB.<br>If bio-activity of the protein is needed, please check active protein                                                                                                                                                                                                                          |
| <b>Stability</b>        | The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 centigrade for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition. |
| <b>Storage</b>          | Avoid repeated freeze/thaw cycles. Store at 2-8 centigrade for one month. Aliquot and store at -80 centigrade for 12 months.                                                                                                                                                                                                                 |
| <b>Reconstitution</b>   | Reconstitute in PBS or others                                                                                                                                                                                                                                                                                                                |
| <b>GENE INFORMATION</b> |                                                                                                                                                                                                                                                                                                                                              |
| <b>Gene Name</b>        | ACY1 aminoacylase 1 [ Homo sapiens ]                                                                                                                                                                                                                                                                                                         |
| <b>Official Symbol</b>  | ACY1                                                                                                                                                                                                                                                                                                                                         |
| <b>Synonyms</b>         | ACY1; aminoacylase 1; aminoacylase-1; acylase; N-acyl-L-amino-acid amidohydrolase; ACY-1; ACY1D;                                                                                                                                                                                                                                             |
| <b>Gene ID</b>          | 95                                                                                                                                                                                                                                                                                                                                           |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                       |           |
|-----------------------|-----------|
| <b>mRNA Refseq</b>    | NM_000666 |
| <b>Protein Refseq</b> | NP_000657 |
| <b>MIM</b>            | 104620    |
| <b>UniProt ID</b>     | Q03154    |

