

# Recombinant Human GAA Protein, His-tagged

**Cat. No.** GAA-160H    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant Human GAA(Ala761~Asn919) fused with His tag at N-terminal was expressed in E. coli.                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>ProteinLength</b>    | Ala761~Asn919                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Description</b>      | This gene encodes lysosomal alpha-glucosidase, which is essential for the degradation of glycogen to glucose in lysosomes. The encoded preproprotein is proteolytically processed to generate multiple intermediate forms and the mature form of the enzyme. Defects in this gene are the cause of glycogen storage disease II, also known as Pompe's disease, which is an autosomal recessive disorder with a broad clinical spectrum. Alternative splicing results in multiple transcript variants. |
| <b>Form</b>             | PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Molecular Mass</b>   | 18.5kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Identity</b>         | Reconstitute in PBS or others                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Endotoxin</b>        | <1.0EU per 1g (determined by the LAL method)                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Purity</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>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                                                                                                                                                                                                                                                                                                                |

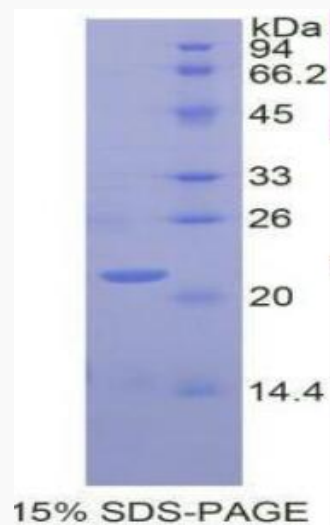
## GENE INFORMATION

|                        |                                                                                                                                                     |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | GAA glucosidase, alpha; acid [ Homo sapiens ]                                                                                                       |
| <b>Official Symbol</b> | GAA                                                                                                                                                 |
| <b>Synonyms</b>        | GAA; glucosidase, alpha; acid; lysosomal alpha-glucosidase; glycogen storage disease type II; Pompe disease; acid maltase; aglucosidase alfa; LYAG; |
| <b>Gene ID</b>         | 2548                                                                                                                                                |
| <b>mRNA Refseq</b>     | NM_000152                                                                                                                                           |
| <b>Protein Refseq</b>  | NP_000143                                                                                                                                           |
| <b>MIM</b>             | 606800                                                                                                                                              |
| <b>UniProt ID</b>      | P10253                                                                                                                                              |

 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



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