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**Product Name:** KD-Validated Alpha Glucosidase Recombinant Rabbit Monoclonal Antibody  
**Catalog #:** KVAb01602

For research use only.

## Summary

|                     |                                                                             |
|---------------------|-----------------------------------------------------------------------------|
| <b>Description</b>  | KO&KD-Validated antibody                                                    |
| <b>Host</b>         | Rabbit                                                                      |
| <b>Application</b>  | WB,FCM,IHC-P                                                                |
| <b>Reactivity</b>   | Human,Mouse,Rat                                                             |
| <b>Conjugation</b>  | Unconjugated                                                                |
| <b>Modification</b> | Unmodified                                                                  |
| <b>Isotype</b>      | Rabbit IgG                                                                  |
| <b>Clonality</b>    | Rabbit mAb                                                                  |
| <b>Form</b>         | Liquid                                                                      |
| <b>Storage</b>      | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| <b>Shipping</b>     | Ice bags                                                                    |
| <b>Buffer</b>       | Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.   |
| <b>Purification</b> | Affinity purification                                                       |

## Application

|                         |                                                         |
|-------------------------|---------------------------------------------------------|
| <b>Dilution Ratio</b>   | WB 1:1,000-1:5,000; FC 1:200-1:2,000; IHC-P 1:100-1:200 |
| <b>Molecular Weight</b> | Calculated MW: 105.3kDa                                 |

## Antigen Information

|                          |                                                                                                                                                                                                             |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>         | GAA                                                                                                                                                                                                         |
| <b>Alternative Names</b> | GAA; Alpha Glucosidase; Lysosomal Alpha-Glucosidase; Glucosidase Alpha, Acid; Aglucosidase Alfa; Acid Maltase; EC 3.2.1.20; Glycogen Storage Disease Type II; Glucosidase, Alpha; Acid; Pompe Disease; LYAG |
| <b>Gene ID</b>           | 2548.0                                                                                                                                                                                                      |
| <b>SwissProt ID</b>      | P10253                                                                                                                                                                                                      |
| <b>Immunogen</b>         | A synthesized peptide derived from human GAA                                                                                                                                                                |

## Background

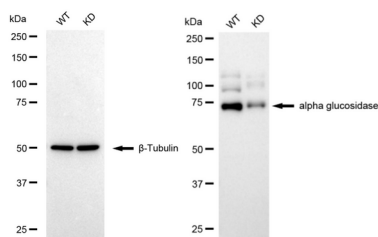
This gene encodes lysosomal alpha-glucosidase, which is essential for the degradation of glycogen to glucose in lysosomes. The encoded preproprotein is proteolytically processed to generate multiple intermediate forms and the mature form of the

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. [provided by RefSeq, Jan 2016]

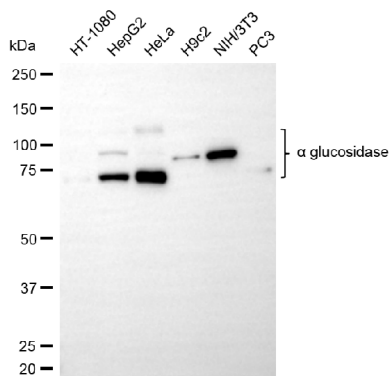
## Research Area

Signal Transduction, Metabolism, Neuroscience

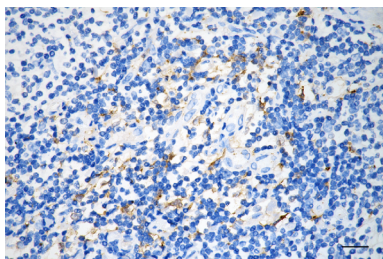
## Image Data



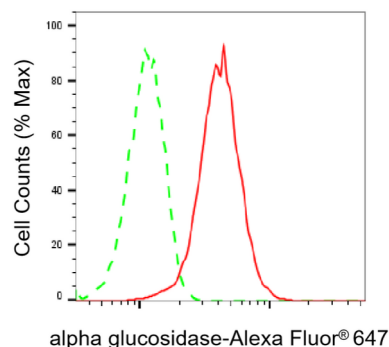
Western blotting analysis using alpha glucosidase antibody (KVA01602). alpha glucosidase expression in wild type (WT) and alpha glucosidase (GAA) knockdown (KD) HSHC cells with 20 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with alpha glucosidase antibody (KVA01602, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using alpha glucosidase antibody (KVA01602). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with alpha glucosidase antibody (KVA01602, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunohistochemistry was performed on paraffin-embedded human pancreatic adenocarcinoma using alpha glucosidase antibody (KVA01602, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Flow cytometric analysis of alpha glucosidase expression in HepG2 cells using alpha glucosidase antibody (KVA01602, 1:2,000). Green, isotype control; red, alpha glucosidase.