

Product Name: KD-Validated GBE1 Mouse Monoclonal Antibody**Catalog #: KVA00542**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM,ICC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Mouse mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2,500; FC 1:100-1:1,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 80.5kDa

Antigen Information

Gene Name	GBE1
Alternative Names	GBE1; 1,4-Alpha-Glucan Branching Enzyme 1; Glucan (1,4-Alpha-), Branching Enzyme 1; 1,4-Alpha-Glucan-Branched Enzyme; Glycogen Branching Enzyme; Brancher Enzyme; EC 2.4.1.18; Amylo-(1,4 To 1,6) Transglucosidase; Amylo-(1,4 To 1,6) Transglycosylase; Glycogen Storage Disease Type IV; Glycogen-Branched Enzyme; Andersen Disease; APBD; GSD4; GBE
Gene ID	2632.0
SwissProt ID	Q04446
Immunogen	Recombinant protein of human GBE1

Background

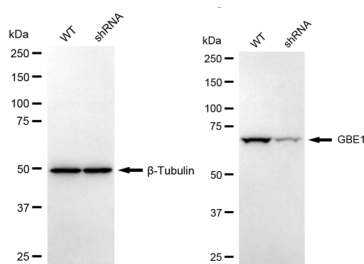
The protein encoded by this gene is a glycogen branching enzyme that catalyzes the transfer of alpha-1,4-linked glucosyl units

from the outer end of a glycogen chain to an alpha-1,6 position on the same or a neighboring glycogen chain. Branching of the chains is essential to increase the solubility of the glycogen molecule and, consequently, in reducing the osmotic pressure within cells. Highest level of this enzyme are found in liver and muscle. Mutations in this gene are associated with glycogen storage disease IV (also known as Andersen's disease). [provided by RefSeq, Jul 2008]

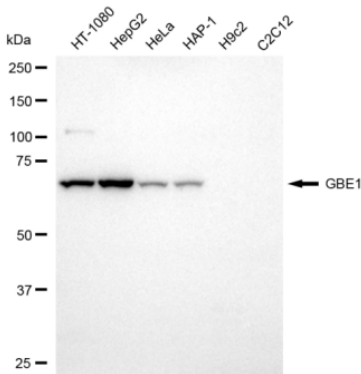
Research Area

Signal Transduction,Cancer,Metabolism

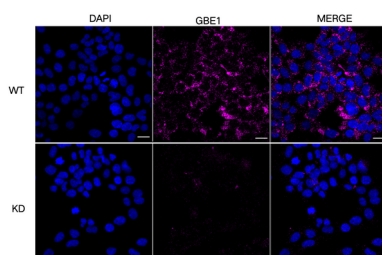
Image Data



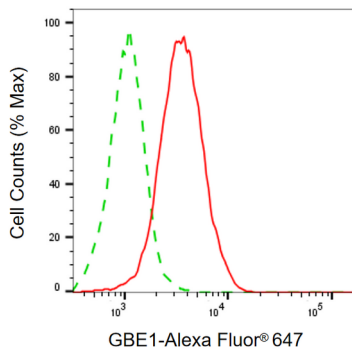
Western blotting analysis using GBE1 antibody (KVA00542). GBE1 expression in wild-type (WT) and GBE1 shRNA knockdown (KD) HeLa cells with 20 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with GBE1 antibody (KVA00542, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Western blotting analysis using GBE1 antibody (KVA00542). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with GBE1 antibody (KVA00542, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Immunocytochemical staining of HeLa cells using GBE1 antibody (KVA00542, 1:1,000), Top panel: wild-type (WT); Bottom panel: GBE1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; GBE1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 μ m.



Flow cytometric analysis of GBE1 expression in HepG2 cells using GBE1 antibody (KVA00542, 1:1,000). Green, isotype control; red, GBE1.