

## Product datasheet for **CF500829**

### GBE1 Mouse Monoclonal Antibody [Clone ID: OTI1D11]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI1D11
Applications:	FC, IF, IP, WB
Recommended Dilution:	WB 1:500~2000, IF 1:50~100, FLOW 1:100, IP 2ug/500ul
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human GBE1 (NP_000149) produced in HEK293T cell.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	80.3 kDa
Gene Name:	1,4-alpha-glucan branching enzyme 1
Database Link:	<a href="#">NP_000149</a> <a href="#">Entrez Gene 2632 Human</a> <a href="#">Q04446</a>



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**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]

**Synonyms:**

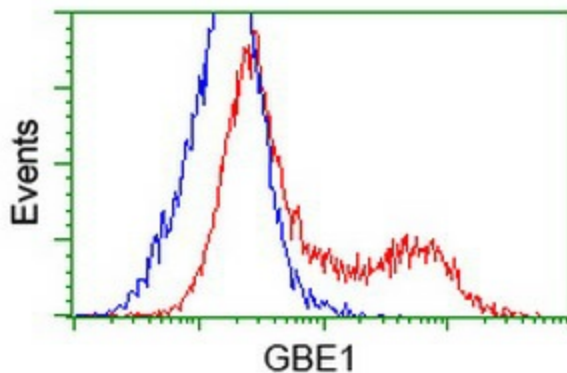
APBD; GBE; GSD4

**Protein Families:**

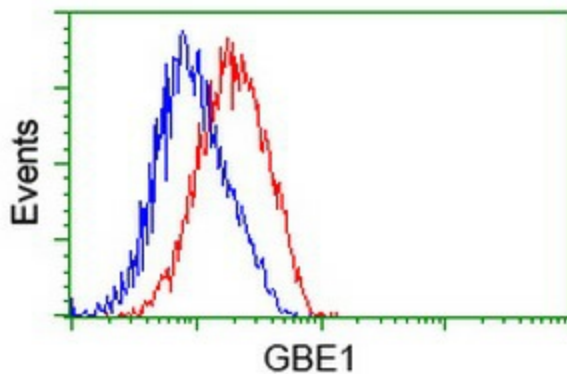
Druggable Genome

**Protein Pathways:**

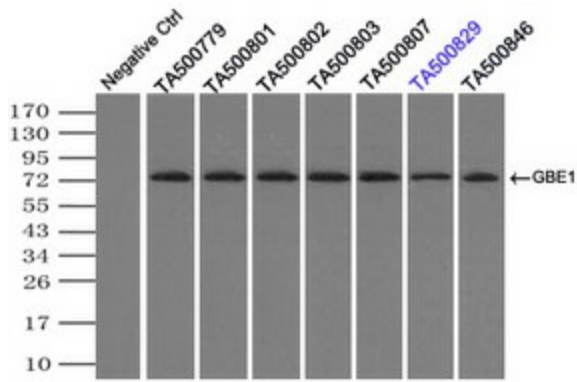
Metabolic pathways, Starch and sucrose metabolism

**Product images:**

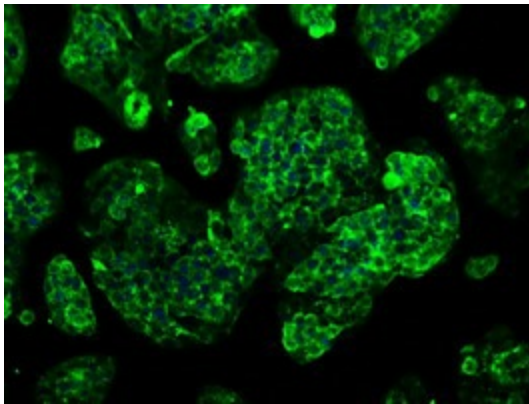
HEK293T cells transfected with either [RC204152] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-GBE1 antibody ([TA500829]), and then analyzed by flow cytometry.



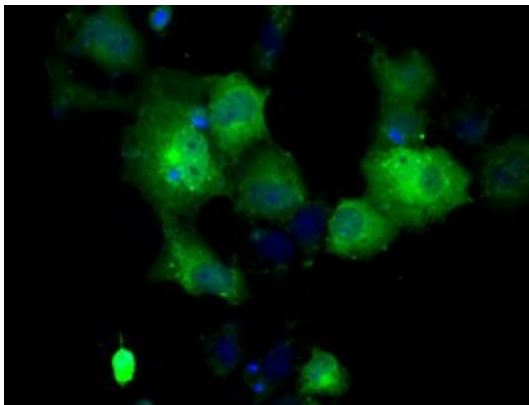
Flow cytometric Analysis of Jurkat cells, using anti-GBE1 antibody ([TA500829]), (Red), compared to a nonspecific negative control antibody, (Blue).



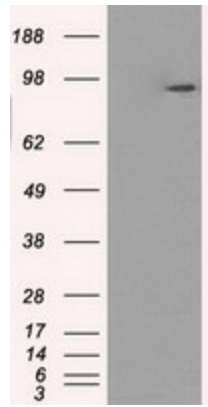
Immunoprecipitation (IP) of GBE1 by using TrueMab monoclonal anti-GBE1 antibodies (Negative control: IP without adding anti-GBE1 antibody.). For each experiment, 500ul of DDK tagged GBE1 overexpression lysates (at 1:5 dilution with HEK293T lysate), 2ug of anti-GBE1 antibody and 20ul (0.1mg) of goat anti-mouse conjugated magnetic beads were mixed and incubated overnight. After extensive wash to remove any non-specific binding, the immunoprecipitated products were analyzed with rabbit anti-DDK polyclonal antibody.



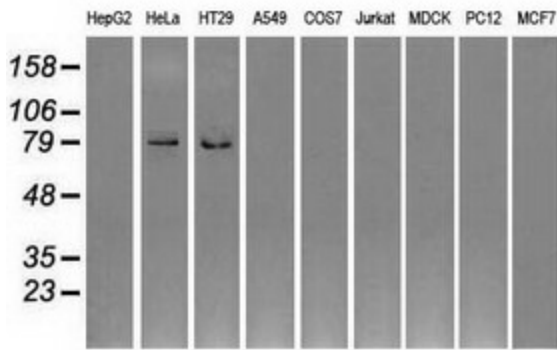
Immunofluorescent staining of HepG2 cells using anti-GBE1 mouse monoclonal antibody ([TA500829]).



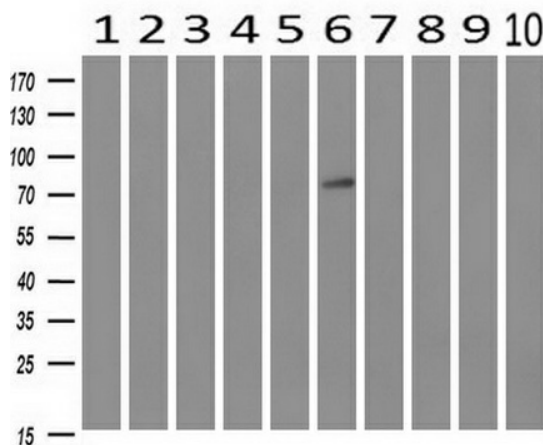
Anti-GBE1 mouse monoclonal antibody ([TA500829]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY GBE1 ([RC204152]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GBE1 (Cat# [RC204152], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GBE1 (Cat# [TA500829]). Positive lysates [LY400056] (100ug) and [LC400056] (20ug) can be purchased separately from OriGene.



Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-GBE1 monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).



Western blot analysis of extracts (10ug) from 10 Human tissue by using anti-GBE1 monoclonal antibody at 1:500 (1: Testis; 2: Omentum; 3: Uterus; 4: Breast; 5: Brain; 6: Liver; 7: Ovary; 8: Thyroid gland; 9: colon; 10: spleen).

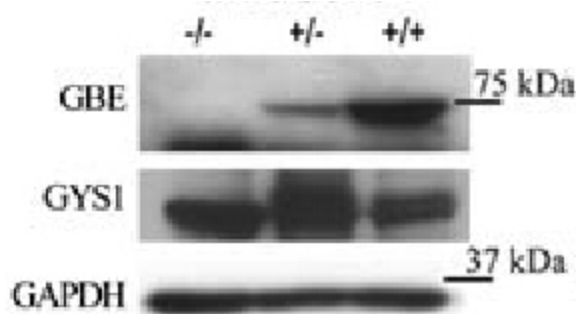


Figure from citation: Western Blot of GBE protein level by using anti-GBE antibody in mouse muscle extracts obtained from Gbe1<sup>-/-</sup>, Gbe1<sup>+/-</sup> and Gbe1<sup>+/+</sup> embryos. [View Citation](#)