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GBE1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9506c

Product Information

Application	WB, IF, E
Primary Accession	Q04446
Other Accession	Q9D6Y9
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB24029
Calculated MW	80474
Antigen Region	527-556

Additional Information

Gene ID	2632
Other Names	4-alpha-glucan-branching enzyme, Brancher enzyme, Glycogen-branching enzyme, GBE1
Target/Specificity	This GBE1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 527-556 amino acids from the Central region of human GBE1.
Dilution	WB~~1:1000 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	GBE1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GBE1
Function	Glycogen-branching enzyme participates in the glycogen biosynthetic process along with glycogenin and glycogen synthase. Generates alpha-1,6-glucosidic branches from alpha-1,4-linked glucose chains, to

increase solubility of the glycogen polymer (PubMed:26199317, PubMed:8463281, PubMed:8613547).

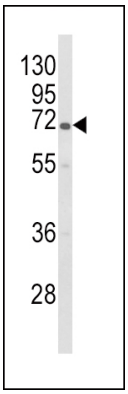
Background

GBE1 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).

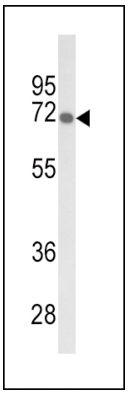
References

Konstantinidou, A.E., et al. Placenta 29(4):378-381(2008)
Massa, R., et al. Muscle Nerve 37(4):530-536(2008)
Bruno, C., et al. Acta Myol 26(1):75-78(2007)

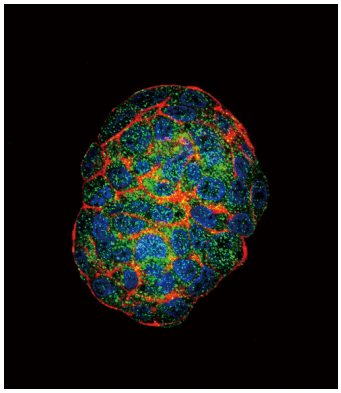
Images



Western blot analysis of GBE1 Antibody (Center) (Cat. #AP9506c) in HL-60 cell line lysates (35ug/lane). GBE1 (arrow) was detected using the purified Pab;



Western blot analysis of GBE1 Antibody (Center) (Cat. #AP9506c) in mouse liver tissue lysates (35ug/lane).GBE1 (arrow) was detected using the purified Pab.



Confocal immunofluorescent analysis of GBE1 Antibody (Center)(Cat#AP9506c) with HepG2 cell followed by Alexa Fluor? 488-conjugated goat anti-rabbit lgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red). DAPI was used to stain the cell nuclear (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.