

## Product datasheet for **TP304152L**

### GBE1 (NM\_000158) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human glucan (1,4-alpha-), branching enzyme 1 (GBE1), 1 mg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC204152 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MAAPMTPAARPEDYEAALNAALADVPELARLLEIDPYLKPYAVDFQRRYKQFSQILKNIGENEGGIDKFS  
RGYESFGVHRCADGGLYCKEWAPGAEGVFLTGDFNGWNPFSYPYKKLDYGKWELYIPPKQNKSVLVPHGS  
KLVVITSKSGEILYRISPAKYVREGDNVNYDWHWDPEHSYEFKHSRPPKPRSLRIYESHVGISSHE  
GKVASYKHFTCNVLPRIKGLGYNCIQLMAIMEHAYASFGYQITSFFAASSRYGSPEELQELVDTAHSMG  
IIVLLDVVHSHASKNSADGLNMFDTGSCYFHSGRGTHDLWDSRLFAYSSWEVLRFLLSNIRWWLEEYR  
FDGFRFDGVTSMYHHHGVGQGFSGDYSEYFGLQVDEDALTYLMLANHLVHTLCPDSITIAEDVSGMPAL  
CSPISQGGGGFDYRLAMAIPDKWIQLLKEFKDEDWNMGDIVYTLNRRYLEKCIAYAESHQALVGDKSL  
AFWLMDAEMYTNMSVLTPTFPVIDRGIQLHKMIRLITHGLGGEGYLNFMGNEFGHPWLDFFPRKGNNESY  
HYARRQFHLLTDDDLLRYKFLNNFDRDMNRLEERYGWLAAPQAYVSEKHEGNKIIAFERAGLLFIFNFHPS  
KSYTDYRVGTALPGFKIVLDSAAEYGGHQRLDHSTDFSEAFEHNGRPYSLLVYIPSRVALILQNVDL  
PN

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

Tag:	C-Myc/DDK
Predicted MW:	80.3 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.



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**Stability:** Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** [NP\\_000149](#)

**Locus ID:** 2632

**UniProt ID:** [Q04446](#), [Q59ET0](#)

**RefSeq Size:** 3118

**Cytogenetics:** 3p12.2

**RefSeq ORF:** 2106

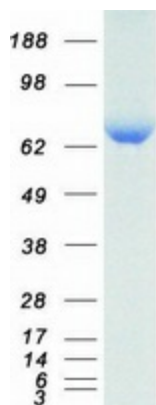
**Synonyms:** APBD; GBE; GSD4

**Summary:** 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]

**Protein Families:** Druggable Genome

**Protein Pathways:** Metabolic pathways, Starch and sucrose metabolism

### Product images:



Coomassie blue staining of purified GBE1 protein (Cat# [TP304152]). The protein was produced from HEK293T cells transfected with GBE1 cDNA clone (Cat# [RC204152]) using MegaTran 2.0 (Cat# [TT210002]).