

Product datasheet for **RC204152**

GBE1 (NM_000158) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GBE1 (NM_000158) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GBE1
Synonyms:	APBD; GBE; GSD4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC204152 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

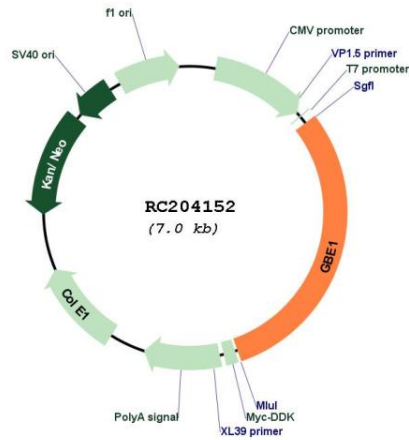
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GCC**CGGATCGCC**

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CCGAAT

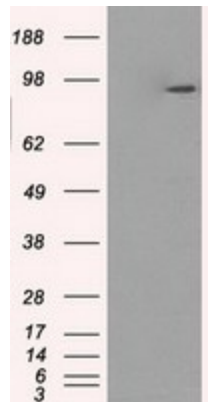
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_000158.4
RefSeq Size:	3118 bp
RefSeq ORF:	2109 bp
Locus ID:	2632
UniProt ID:	Q04446
Cytogenetics:	3p12.2
Domains:	isoamylase_N, alpha-amylase, Amy
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, Starch and sucrose metabolism
MW:	80.4 kDa
Gene 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]

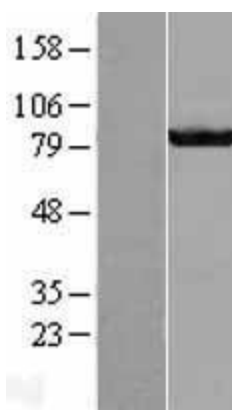
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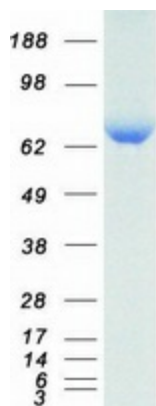
Circular map for RC204152



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 validation of overexpression lysate (Cat# [LY400056]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204152 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



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]).