

## Product datasheet for **RC206171**

### **POGLUT3 (NM\_153705) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	POGLUT3 (NM_153705) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	POGLUT3
Synonyms:	KDELC2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC206171 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCGCCGCTCCCGCGGCCCTGCTGCTGCAGCTGCGCCTCGCCCTGCTGGTGGCCGGGGGCCCGG  
 AGGTGCTGGTCAGCGCGCCGCGGAGCCTGGTGTGGGGGCCCGGGCTGCAGCGGCCGCTCGTCTGCCGGT  
 CCGCTATTTCTACCTGCAGGCGGTCAACTCGGAGGGCCAGAACCCTCACTCGCTCTCCCGCAGGTGAAACA  
 CCATTCAAAGTCGTAGTCAAATCTCTTTACCTAAAGAGTTGGTCCGGATACATGTCCTAAACCTTTGG  
 ACAGGAATGATGGAACATTTTTGATGAGATATAGGATGTATGAACTGTCGATGAAGGCCTGAAGATAGA  
 GGTCTTTATGGTATGAACATGTGGCTCAGTCTCCCTATATTTTGAAGGACCAGTGTACCATGAGTAC  
 TGTGAGTGTCCGAAGATCCTCAGGCTGGCAGAAGACTCTTCTGTCCAACCAAGGAACCACAGATTG  
 CAAAAGATTTTGCTTCTTTCCAGCATCAATCTCCAGCAAATGCTAAAAGAAGTCCCAAAAGGTTTGG  
 GGATGAGAGAGGTGCCATTGTTTACACGATTCTCAATAACCATGTTTACCGGAGATCTTTAGGGAAA  
 TACACAGACTTCAAGATGTTCTCTGATGAGATTTGTTATCATTGACAAGAAAGTCCCTCTCCAGATT  
 TAGAATTTTATGTTAATCTTGGAGATTGGCCCTTGGAGCATCGAAAAGTCAATGGAACCCCTAGCCCAT  
 ACCTATCATTTATGGTGTGGCTCTCTGGATTCAAGAGATGTTGTCTTCCAACGTATGACATCACCCAC  
 TCCATGCTTGAAGCCATGCGGGGTGTTACAAATGATCTCCTCTCTATTACGGGAAATACAGGGCCTTCT  
 GGATCAATAAAACAGAGAGAGCTTTCTCAGAGGTAGAGACAGCCTAGAGGAGAGGCTCCAGTTGGTACA  
 GCTGTCCAAGAAAATCCTCAGCTACTAGATGCAGGAATTACAGGATATTTCTTTTCCAAGAGAAAAGAA  
 AAGGAGCTTGGAAAAGCCAAGTTGATGGGTTTCTTTGATTTCTTTAAGTACAAGTATCAAGTAAATGTGG  
 ATGGGACCGTGGCTGCTTACAGATATCCATATCTCATGCTGGGACAGTCTGGTTTTAAAGCAGGACTC  
 GCCATATTATGAACATTTCTACATGGCACTAGAACCCTTGAAGCATTATGTTCCAATTAAGAAAATCTG  
 AGTGATTTATTAGAGAAAGTTAAATGGGCTAAGGAAAATGATGAAGAAGCCAAGAAGATTGCAAAAAGAG  
 GACAGTTGATGGCTAGGGACCTACTACAGCCACACAGGCTTTACTGCTACTATTACCAAGTACTGCAGAA  
 ATATGCCGAGCGCCAGTCCAGCAAACCCGAAGTACGTGATGGAATGGAACCTGTTCTCAGCCAGAAGAT  
 AGCACAGCCATCTGCCAGTGCCACAGGAAAAGCCTTCAAGAGAAGAAGT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC206171 protein sequence  
 Red=Cloning site Green=Tags(s)

MRRLPRALLLQLRLALLVAAGAPEVLVSAPRSLVWGPGLQAAVPLPVRYFYLVQAVNSEGQNLTRSPAGET  
 PFKVVVKSLSPELVRIVHPKPLDRNDGTFMLRMYRYETVDEGLKIEVL YGDEHVAQSPYILKGPVYHEY  
 CECPEDPQAWQKTLSCPTKEPQIAKDFASFPSINLQQMLKEVPKRFGDERGAIIVHYTILNNHVYRRLGK  
 YTDFKMFSDIILLSLTRKVLPLDFYVNLGDWPLEHRKVNGTSPPIIISWCGSLDSRDVVLPTYDITH  
 SMLEAMRGVTNDLLSIQNGTGPSWINKTERAFFRGRDSLEERLQLVQLSKENPQLLDAGITGYFFFQEK  
 KELGKAKLMGFFDFFKYQVNVVDGTVAAAYRYPYMLGDSLVLKQDSPYEHFYMALEPWKHYVPKRN  
 LDLEKVKWAKENDEEAKKIAKEGQLMARDLLQPHRLCYYYYQVLQKYAERQSSKPEVRDGMELVPQPED  
 STAICQCHRKKPSREEL

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6232\\_a01.zip](https://cdn.origene.com/chromatograms/mk6232_a01.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_153705

**ORF Size:** 1521 bp

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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:**
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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_153705.5](#)

**RefSeq Size:** 4311 bp

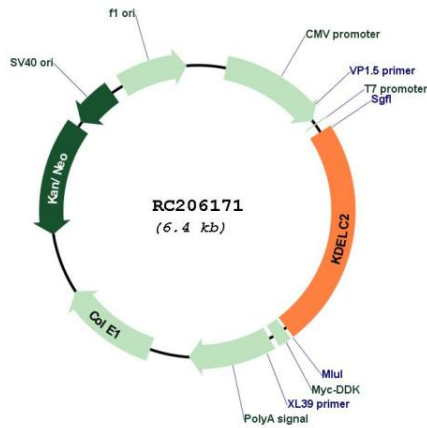
**RefSeq ORF:** 1524 bp

**Locus ID:** 143888

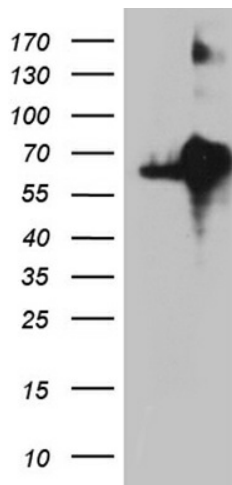
UniProt ID: [Q7Z4H8](#)  
 Cytogenetics: 11q22.3  
 Domains: CAP10  
 MW: 58.5 kDa

**Gene Summary:** Protein glucosyltransferase that catalyzes the transfer of glucose from UDP-glucose to a serine residue within the consensus sequence peptide C-X-N-T-X-G-S-F-X-C (PubMed:30127001). Can also catalyze the transfer of xylose from UDP-xylose but less efficiently (PubMed:30127001). Specifically targets extracellular EGF repeats of proteins such as NOTCH1 and NOTCH3 (PubMed:30127001). May regulate the transport of NOTCH1 and NOTCH3 to the plasma membrane and thereby the Notch signaling pathway (PubMed:30127001).[UniProtKB/Swiss-Prot Function]

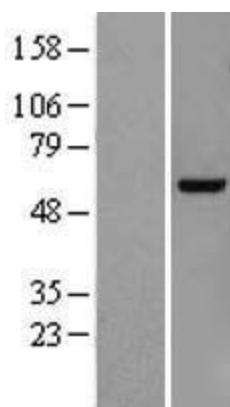
**Product images:**



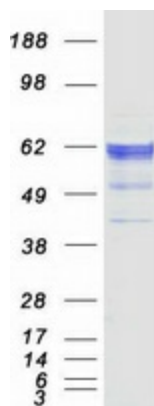
Circular map for RC206171



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY KDEL2 (Cat# RC206171, 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-KDEL2 (Cat# [TA809568])(1:2000). Positive lysates [LY406972] (100ug) and [LC406972] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY406972]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206171 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified POGLUT3 protein (Cat# [TP306171]). The protein was produced from HEK293T cells transfected with POGLUT3 cDNA clone (Cat# RC206171) using MegaTran 2.0 (Cat# [TT210002]).