

Product datasheet for RC219177

KTEL1 (POGLUT1) (NM_020231) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KTEL1 (POGLUT1) (NM_020231) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KTEL1
Synonyms:	CLP46, MDSRP, C3orf9, MDS010, hCLP46, KDELC1, MGC32995
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC219177 representing NM_020231 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGAGTGGTGGGCTAGCTCGCGCTTCGGCTCTGGCTGCTGTTGTTCTCCTGCCCTCAGCGCAGGGCC
 GCCAGAAGGAGTCAGGTTCAAATGAAAGTATTTATTGACCAAATTAACAGGTCTTTGGAGAATTACGA
 ACCATGTTCAAGTCAAACCTGCAGCTGCTACCATGGTGTCTAGAGAGGATCTAACTCCTTTCCGAGGA
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 AGCTGAAGCCATGGGTTCACTATATCCAGTCAAACAGATCTCTCAATGTCCAAGAGCTGTTACAATT
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
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Protein Sequence: >RC219177 representing NM_020231
 Red=Cloning site Green=Tags(s)

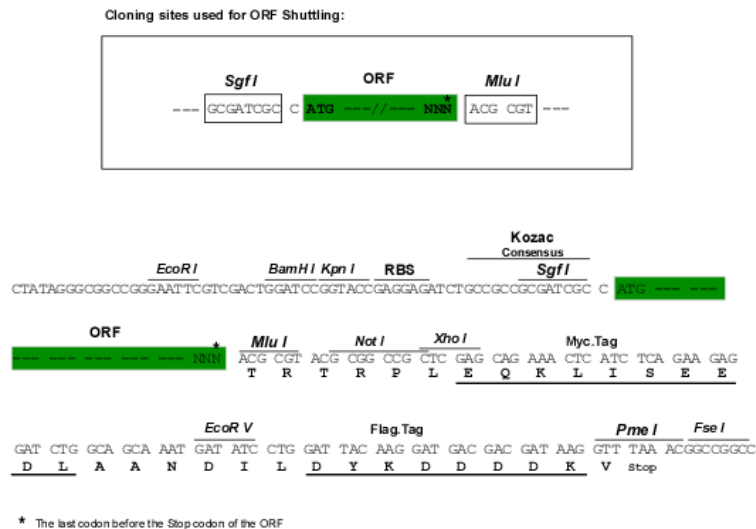
MEWWASSPLRLWLLLFLPSAQGRQKESGSKWKVFIHQINRSLENYEPCSSQNCSCYHGVIEEDLTPFRG
 GISRKMMAEVVRRLGTHYQITKNRLYRENDCMFSPRCSGVEHFIEVIGRLPDMEMVINVRDYPQVPKW
 MEPAIPVFSFSKTSEYHDIMYPAWTFWEGGPAVWPIYPTGLGRWDLFREDLVRSAQWPWKKNSTAYFR
 GSRTSPERDPLILLSRKNPKLVDAEYTKNQAWKSMKDTLGKPAKDVHLVDHCKYKYLNFNRGVAASFRF
 KHLFLCGSLVFHVGDWLEFFYPQLKPWVHYIPVKTDLSNVQELLQFVKANDDVAQEIAERGSQFIRNHL
 QMDDITCYWENLLSEYSKFLSYNVTRRGYDQIIPKMLKTEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6044_e09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_020231

ORF Size: 1176 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_020231.3](#), [NP_064616.2](#)

RefSeq Size: 1973 bp

RefSeq ORF: 1178 bp

Locus ID: 56983

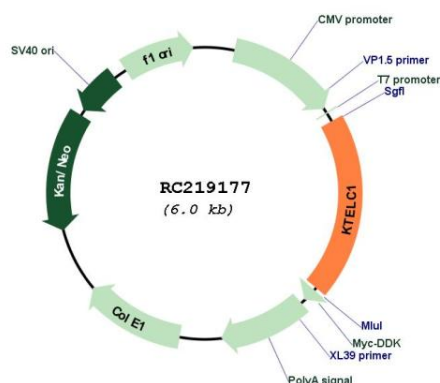
Cytogenetics: 3q13.33

Domains: CAP10

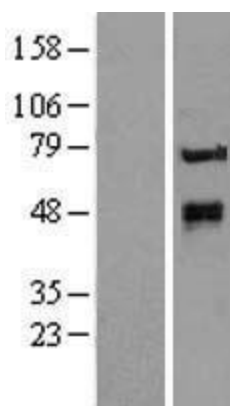
MW: 46 kDa

Gene Summary: This gene encodes a protein with both O-glucosyltransferase and O-xylosyltransferase activity which localizes to the lumen of the endoplasmic reticulum. This protein has a carboxy-terminal KTEL motif which is predicted to function as an endoplasmic reticulum retention signal. This gene is an essential regulator of Notch signalling and likely plays a role in cell fate and tissue formation during development. It may also play a role in the pathogenesis of leukemia. Mutations in this gene have been associated with the autosomal dominant genodermatosis Dowling-Degos disease 4. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2014]

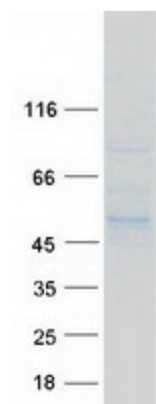
Product images:



Circular map for RC219177



Western blot validation of overexpression lysate (Cat# [LY402765]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219177 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified KTELC1 protein (Cat# [TP319177]). The protein was produced from HEK293T cells transfected with KTELC1 cDNA clone (Cat# RC219177) using MegaTran 2.0 (Cat# [TT210002]).