

Product datasheet for **RG216275**

POT1 (NM_015450) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	POT1 (NM_015450) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	POT1
Synonyms:	CMM10; GLM9; HPOT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG216275 representing NM_015450
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTCTTTGGTCCAGCAACAAATTATATATACACCCCTGAATCAACTTAAGGGTGGTACAATTGTCA
 ATGTCTATGGTGTGTGAAGTTCTTTAAGCCCATATCTAAGCAAAGGAACTGATTATTGCTCAGTTGT
 AACTATTGTGGACCAGACAAATGTAATACTTGCCTGCTCTTTAGTGAAACTATGAAGCCCTTCCA
 ATAATTTATAAAATGGAGATATTGTTTCGCTTTACAGGCTGAAGATTCAAGTATATAAAAAGGAGACTC
 AGGGTATCACCAGCTCTGGCTTTGCATCTTTGACGTTTGGAGAACTTTGGGAGCCCTATCATACTCG
 CACTTCAAGCAAGTATTTAACTTCACTACTGAGGACCACAAAATGGTAGAAGCCTTACGTGTTGGGCA
 TCTACTCATATGCACCGTCTTGGACATTACTAAAATTGTGTGATGTTCCAGCCAATGCAGTATTTGACC
 TGACTTGTGAGCTCTTGGCAAAGCAGAAGTGGACGGAGCATATTTCTTAAAGGTATGGGATGGCAC
 CAGGACACCATTCCATCTTGGAGAGTCTTAATACAAGACCTTGTCTTGAAGGTATTTAAGTCACATC
 CATCGGCTACAAAATCTGACAATAGACATTTTAGTCTACGATAACCATGTTTCATGTGGCAAGATCTCTGA
 AGGTTGGAAGCTTTCTTGAATCTATAGCCTTCATACCAAATCAATCAATGAATTCAGAGAATCAGAC
 AATGTTAAGTTTAGAGTTTCATCTTCATGGAGGTACCAGTTACGGTCCGGGAATCAGGGTCTTGCCAGAA
 AGTAACTCTGATGTGGATCAACTGAAAAAGGATTTAGAATCTGCAAAATTTGACAGCCAATCAGCATTGAG
 ATGTTATCTGTCAATCAGAACCTGACGACAGCTTTCCAAGCTCTGGATCAGTATCATTATACGAGGTAGA
 AAGATGTCAACAGCTATCTGCTACAATACTTACAGATCATCAGTATTTGGAGAGGACCCACTATGTGCC
 ATTTTGAACAAGCTCCTCAACAATACCGCATCCGAGCAAAATTTGAGGTATATAAGCCAGAAAGAC
 TATTTGAGTCTGTTAACTTCAATGCCCCTAAATGTCAATTTGCTGCAAGAAGTTCCACATGAGGGCGATTT
 GGATATAATTTTTCAGGATGGTGAACATAAAACCCAGTTGTCAAGTTACAAAATACATCATTATATGAT
 TCAAAAATCTGGACCACTAAAAATCAAAAAGGACGAAAAGTAGCAGTTCAATTTTGTGAAAAATAATGGTA
 TTCTCCCGCTTTCAAATGAATGTCTACTTTTGTAGAAGGAGGTACACTCAGTGAATTTGCAAACTCTC
 GAACAAGTTAATAGTGAATTCCTGTGAGATCTGGCCACGAAGACCTGGAATTTTGGACCTTTGAGCA
 CCATTTCTTATAAAGGAACAATACATCACTATGGATGTAACAGTGTCTAGTTTGGAGATCCATACAAA
 ATCTAAATCCCTGGTTGATAAAACATCGTGGATTCCTTCTTCTGTGGCAGAAGCACTGGGTATTGTACC
 CCTCAATATGTGTTTGTATGACCTTTACTTGTATGATGGAACAGGAGTACTAGAAGCCTATCTCATG
 GATTCTGACAAATCTTCCAGATCCAGCATCAGAAGTCTGATGGATGATGACCTTCAGAAAAGTGTGG
 ATATGATCATGGATATGTTTTGTCTCCAGGAATAAAAATTTGATGCATATCCGTGTTGGAAATGCTTCAT
 CAAGTCATACAATGTCACAAATGGAACAGATAATCAAATTTGCTATCAGATTTTTGACACCACAGTTGCA
 GAAGATGTAATC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG216275 representing NM_015450
 Red=Cloning site Green=Tags(s)

MSLVPATNYIYTPLNQLKGGTIVNVYGVKFFKPPYLSKGTDYCSVVTIVDQTNVKLTCLLFSGNYEALP
 IYKNGDIVRFHRLKIQVYKQITSSGFASLTFEGLGAPIIPRTSSKYFNFTTEDHKMVEALRVWA
 STHMSPSWTLLKCDVQPMQYFDLTCQLLGAEVDGASFLKLVWDGTRTPFPFSWRVLIQDLVLEGLDLSHI
 HRLQNLTDILVYDNHVHVARSLKVGSLRIYSLHTKLQSMNSENQTMLSEFHLHGGTSYGRGIRVLP
 SNSDQVQLKLDLESANLTANQHSQVQSEPDDSFSSGSVSLYEVECCQQLSATILTDHQLERTPLCA
 ILKQKAPQYRIRAKLRSYKPRRLFQSVKLVHCPKCHLLQEVPHGDLDIIFQDQATKTPVVKLQNTSLYD
 SKIWTTKNQKGRKVAHFVKNNGILPLSNECLLIEGGTSEICKLSNKFNSVIPVRSGHEDLELLDL
 PFLIQGTIHHYGCKQCSSLRISIQNLNSLVDKTSWIPSSVAEALGIVPLQYVFMFTLDDGTGVLEAYLM
 DSDKFFQIPASEVLMDDDLQKSDMIMDMFCPPGIKIDAYPWLECFIKSYNVTNGTDNQICYQIFDTTVA
 EDVI

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_015450

ORF Size: 1902 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.

RefSeq: [NM_015450.1](#), [NP_056265.1](#)

RefSeq Size: 2631 bp

RefSeq ORF: 1905 bp

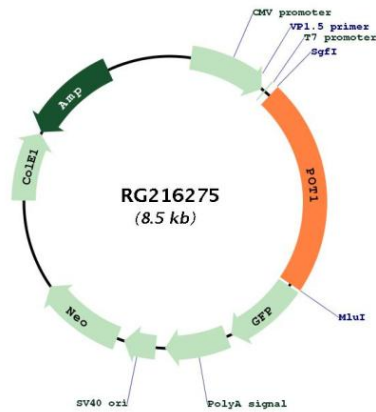
Locus ID: 25913

UniProt ID: [Q9NUX5](#)

Cytogenetics: 7q31.33

Gene Summary: This gene is a member of the telombin family and encodes a nuclear protein involved in telomere maintenance. Specifically, this protein functions as a member of a multi-protein complex that binds to the TTAGGG repeats of telomeres, regulating telomere length and protecting chromosome ends from illegitimate recombination, catastrophic chromosome instability, and abnormal chromosome segregation. Increased transcriptional expression of this gene is associated with stomach carcinogenesis and its progression. Alternatively spliced transcript variants have been described. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG216275