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Product datasheet for RG209241

CRTR1 (TFCP2L1) (NM_014553) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CRTR1 (TFCP2L1) (NM_014553) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CRTR1
Synonyms:	CRTR1; LBP-9; LBP9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

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ORF Nucleotide Sequence:

>RG209241 representing NM_014553
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTCTTCTGGCACACGCAGCCCGAGCACTACAACCAGCACAACTCCGGCAGCTACCTGCGTGATGTGC
TCGCTCTGCCCATCTTCAAGCAGGAGGAACCCCAGCTGTCCCCCGAGAACGAGGCCCGCCTGCCACCCCT
GCAATATGTGTTGTGTGCTGCCACGTCCCCAGCCGTGAAGCTGCATGAAGAGACGCTGACCTACCTCAAC
CAAGGTCAGTCTTATGAAATCCGACTACTGGAGAATCGGAAGCTGGGAGACTTTCAAGATCTGAACACAA
AATATGTCAAGAGCATCATCCGTGTGGTCTTCCATGACCGCCGGCTGCAGTATACGGAGCACCAGCAGCT
GGAGGGCTGGCGGTGGAGTCGGCCAGGGGACCGGATCCTGGACATCGATATTCCACTGTCTGTTGGTATC
TTGGACCCCAGGGCCAGCCCGACCCAGCTGAATGCAGTCGAGTTTTTGTGGGACCCTGCGAAGAGAGCTT
CTGCATTCATTCAGGTACACTGCATCAGCACAGAATTCACCCCCAGGAAGCACGGGGGCGAGAAGGGAGT
GCCCTTTCGAGTCCAGATTGACACGTTTAAGCAGAACGAGAATGGGGAGTACACGGAGCACCTGCACTCA
GCCAGCTGCCAGATCAAGGTGTTCAAGCCGAAGGGAGCCGATCGGAAACAGAAGACTGACCGGGAGAAGA
TGGAGAAAAGAACTGCCCAAGAGAAGGAGAAATACCAGCCGTCCTATGAAACCACCATCCTCACAGAGTG
CTCTCCATGGCCCGACGTGGCCTACCAGGTGAACAGCGCCCCGTCCCCAAGCTACAATGGTTCTCCAAAC
AGCTTTGGCCTCGGCGAAGGCAACGCCTCTCCGACCCACCCGGTGGAGGCCCTGCCCGTGGGCAGTGACC
ACCTGCTCCCATCAGCTTCGATCCAGGATGCCCAGCAGTGGCTTCACCGCAACAGGTTCTCGCAGTTCTG
CCGGCTCTTTGCCAGCTTCTCAGGTGCTGACTTGCTGAAGATGTCCCGAGATGATTTGGTCCAGATCTGT
GGTCCCGCAGATGGGATCCGGCTCTTCAACGCCATCAAAGGCCGGAATGTGAGGCCAAAGATGACCATTT
ATGTCTGTCAGGAGCTGGAGCAGAATCGAGTGCCCCTGCAGCAGAAGCGGGACGGCAGTGGAGACAGCAA
CCTGTCTGTGTACCACGCCATCTTCCTGGAAGAGCTGACCACCTTGGAGCTGATTGAGAAGATCGCCAAC
CTGTACAGCATCTCCCCCCAGCACATCCACCGAGTCTACCGGCAGGGCCCCACGGGCATCCATGTGGTGG
TGAGCAACGAGATGGTGCAGAACTTCCAAGATGAATCCTGTTTTGTCCTCAGCACAATTAAAGCTGAGAG
CAATGATGGCTACCACATCATCCTGAAATGTGGACTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

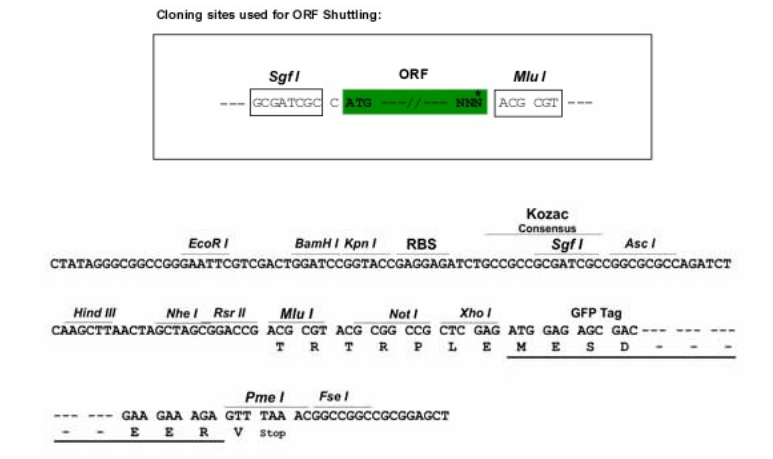
>RG209241 representing NM_014553
Red=Cloning site Green=Tags(s)

MLFWHTQPEHYNQHNSGSYLRDVLALPIFKQEEPQLSPENEARLPPLQYVLCAATSPAVKLHEETLTYLN
QGQSYEIRLLENRKLGDFQDLNTKYVKSIIRVVFHDRRLQYTEHQQLEGWRWSRPGDRILDIDIPLSVGI
LDPRASPTQLNAVEFLWDPAKRASAFIQVHCISTEFTPRKHGGEKGVPFRVQIDTFKQNENGEYTEHLHS
ASCQIKVFKPKGADRKQKTDREKMEKRTAQEKEKYQPSYETTILTECSPWPDVAYQVNSAPSPSYNGSPN
SFGLGEGNASPTHPVEALPVGSDHLLPSASIQDAQQWLHRNRFSQFCRLFASFSGADLLKMSRDDLVQIC
GPADGIRLFNAIKGRNVRPKMTIYVCQELEQNRVPLQQKRDGSGDSNLSVYHAIFLEELTTLELIEKIAN
LYSISPQHIHRVYRQGPTGIHVVVSNEMVQNFQDESCFVLSTIKAESNDGYHIILKCGL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



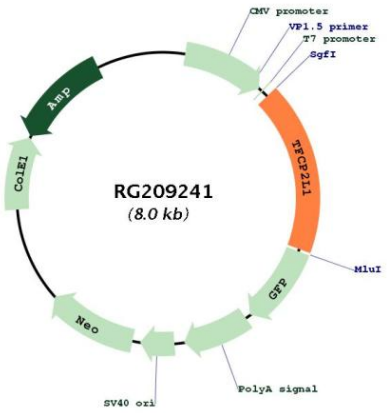
ACCN:	NM_014553
ORF Size:	1437 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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_014553.3
RefSeq Size:	4909 bp
RefSeq ORF:	1440 bp
Locus ID:	29842
UniProt ID:	Q9NZI6

Cytogenetics: 2q14.2

Protein Families: Transcription Factors

Gene Summary: Transcription factor that facilitates establishment and maintenance of pluripotency in embryonic stem cells (ESCs) (PubMed:25215486, PubMed:26906118). With KLF2, acts as the major effector of self-renewal that mediates induction of pluripotency downstream of LIF/STAT3 and Wnt/beta-catenin signaling (By similarity). Required for normal duct development in the salivary gland and kidney (By similarity). Coordinates the development of the kidney collecting ducts intercalated (IC) and principal (PC) cells, which regulate acid-base and salt-water homeostasis, respectively (By similarity). Regulates the expression of IC genes including subunits B1 and D2 of the V-ATPase complex, OXGR1, CA12, SLC4A1, AQP6 and IC-specific transcription factor FOXI1 (By similarity). Regulates also the expression of JAG1 and subsequent notch signaling in the collecting duct (By similarity). JAG1 initiates notch signaling in PCs but inhibits notch signaling in ICs (By similarity). Acts as a transcriptional suppressor that may suppress UBP1-mediated transcriptional activation (By similarity). Modulates the placental expression of CYP11A1 (PubMed:10644752).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG209241