

Product datasheet for **RC212841**

Parathyroid Hormone Receptor 1 (PTH1R) (NM_000316) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Parathyroid Hormone Receptor 1 (PTH1R) (NM_000316) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Parathyroid Hormone Receptor 1
Synonyms:	EKNS; PFE; PTHR; PTHR1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC212841 representing NM_000316
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGGGACCGCCCGGATCGACCCGGCCTGGCGCTCCTGTCTGTGCCCCGTGCTCAGCTCCGCGTACG
 CGCTGGTGGATGCAGATGACGTCATGACTAAAGAGGAACAGATCTTCTGCTGCACCGTGTCTCAGGCCCA
 GTGCGAAAAACGCTCAAGGAGGTCTGCAGAGGCCAGCCAGCATAATGGAATCAGACAAGGGATGGACA
 TCTGCGTCCACATCAGGGAAGCCAGGAAAGATAAGGCATCTGGGAAGCTCTACCCTGAGTCTGAGGAGG
 ACAAGGAGGCACCCACTGGCAGCAGGTACCGAGGGCGCCCTGTCTGCCGAATGGGACCACATCTGTG
 CTGGCCGCTGGGGCACCAGGTGAGGTGGTGGCTGTGCCCTGTCCGGACTACATTTATGACTTCAATCAC
 AAAGGCCATGCCTACCGACGCTGTGACCGCAATGGCAGCTGGGAGCTGGTGCCTGGGCACAACAGGACGT
 GGGCCAACACAGCGAGTGTCAAATTTCTACCAATGAGACTCGTGAACGGGAGGTGTTTGACCGCCT
 GGGCATGATTTACACCGTGGGCTACTCCGTGTCCCTGGCGTCCCTCACCGTAGCTGTCTCATCCTGGCC
 TACTTTAGGCGGCTGCACTGCACGCGCAACTACATCCACATGCACCTGTTCTGTCTTTCATGCTGCGCG
 CCGTGAGCATCTTCGTAAGGACGCTGTGCTCTACTCTGGCGCCACGCTTGATGAGGCTGAGCGCCTCAC
 CGAGGAGGAGCTGCGCGCCATCGCCAGGGCCCCCGCCGCTGCCACCGCCGCTGCCGGCTACGCGGGC
 TGCAGGGTGGCTGTGACCTTCTTCTTTACTTCTGGCCACCAACTACTACTGGATTCTGGTGGAGGGGC
 TGTACCTGCACAGCCTCATCTTCATGGCCTTCTTCTCAGAGAAGAAGTACCTGTGGGGCTTACAGTCTT
 CGGCTGGGGTCTGCCCGTGTCTTCGTGGCTGTGTGGTCACTGTGAGGCTACCTGGCCAACACCGGG
 TGCTGGGACTTGAGCTCCGGGAACAAAAGTGGATCATCCAGGTGCCATCCTGGCCTCCATTGTGCTCA
 ACTTCATCCTTTCATCAATATCGTCCGGTGTCTGCCACCAAGCTGCGGGAGACCAACCGCCGGGTG
 TGACACACGGCAGCAGTACCGGAAGCTGCTCAAATCCACGCTGGTGTCTCATGCCCTCTTTGGCGTCCAC
 TACATTGTCTTTCATGCCACACCATACACCGAGGTCTCAGGGACGCTCTGGCAAGTCCAGATGCACTATG
 AGATGCTCTTCAACTCCTCCAGGGATTTTTGTGCGCAATCATATACTGTTTCTGCAACGGCGAGGTACA
 AGCTGAGATCAAGAAATCTTGGAGCCGCTGGACTGGCACTGGACTTCAAGCGAAAGGCACGCAGCGGG
 AGCAGCAGCTATAGTACGGCCCATGGTGTCCACACAAGTGTGACCAATGTGCGCCCCGTGTGGGAC
 TCGGCTGCCCTCAGCCCCGCTACTGCCACTGCCACCACCAACGGCCACCCTCAGTGCCTGGCCA
 TGCCAAGCCAGGGACCCAGCCCTGGAGACCCTCGAGACCACACCACCTGCCATGGCTGCTCCAAGGAC
 GATGGGTTCTCAACGGCTCCTGCTCAGGCCTGGACGAGGAGCCTCTGGGCTGAGCGCCACCTGCC
 TGCTACAGGAAGAGTGGGAGACAGTCATG

ACGCGTACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC212841 representing NM_000316
 Red=Cloning site Green=Tags(s)

MGTARIAPGLALLLCCPVLSSAYALVDADDVMTKEEQIFLLHRAQAQCEKRLKEVLQRPASIMESDKGWT
 SASTSGKPRKDKASGKLYPESEEDKEAPTGSRYRGRPCLPEWDHILCWPLGAPGEVAVPCPDYIYDFNH
 KGHAYRRCDRNGSWELVPGHNRTWANYSECVKFLTNETREREVFDRLGMIYTVGYSVSLASLTVAVLILA
 YFRRLHCTRNYIHMHLFLSFMLRAVSIKDAVLYSGATLDEAERLTEEELRAIAQAPPPATAAAGYAG
 CRVAVTFFLYFLATNYYWILVEGLYLHSLIFMAFFSEKKYLWGFVTFGWGLPAVAVVWVSVRATLANTG
 CWDLSSGNKKWIIQVPILASIVLNFILFINIVRVLATKLRNAGRCDTRQYRKLKSTLVLMPPLFGVH
 YIVFMATPYTEVSGTLWQVQMHYEMLFNSFQGFVAIIYCFNGEVQAEIKKSWSRWTLALDFKRAKRS
 SSSYSYGPMSVHTSVTNVGRVGLGLPLSPRLLPTATTNGHPQLPGHAKGTPALETLETPPAMAAPKD
 DGFLNGSCSGLDEEASGPERPPALLQEEWETVM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg2556_d07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000316

ORF Size: 1779 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.

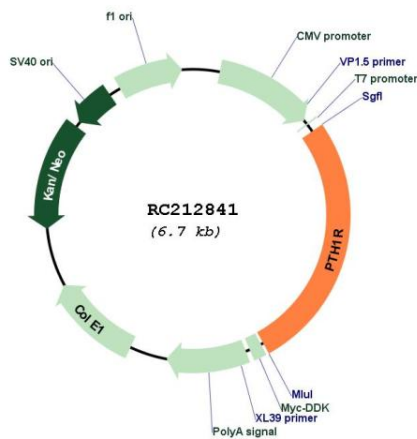
RefSeq: [NM_000316.3](#)

RefSeq Size: 2144 bp

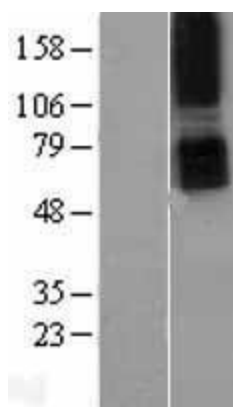
RefSeq ORF: 1782 bp

Locus ID:	5745
UniProt ID:	Q03431
Cytogenetics:	3p21.31
Protein Families:	Druggable Genome, GPCR, Transmembrane
Protein Pathways:	Neuroactive ligand-receptor interaction
MW:	66.36 kDa
Gene Summary:	The protein encoded by this gene is a member of the G-protein coupled receptor family 2. This protein is a receptor for parathyroid hormone (PTH) and for parathyroid hormone-like hormone (PTH LH). The activity of this receptor is mediated by G proteins which activate adenylyl cyclase and also a phosphatidylinositol-calcium second messenger system. Defects in this receptor are known to be the cause of Jansen's metaphyseal chondrodysplasia (JMC), chondrodysplasia Blomstrand type (BOCD), as well as enchondromatosis. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, May 2010]

Product images:



Circular map for RC212841



Western blot validation of overexpression lysate (Cat# [LY400119]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212841 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).