

Product datasheet for RC212858

Parathyroid hormone related protein (PTH LH) (NM_002820) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Parathyroid hormone related protein (PTH LH) (NM_002820) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Parathyroid hormone related protein
Synonyms:	BDE2; HHM; PLP; PTHR; PTHRP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC212858 representing NM_002820 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCAGCGGAGACTGGTTCAGCAGTGGAGCGTCGCGGTGTTCTGCTGAGCTACGCGGTGCCCTCTGCG
GGCGCTCGGTGGAGGGTCTCAGCCGCCGCTCAAAGAGCTGTGTCTGAACATCAGCTCCTCCATGACAA
GGGAAGTCCATCAAGATTTACGGCGACGATTCTTCTCACCATCTGATCGCAGAAATCCACACAGCT
GAAATCAGAGCTACCTCGGAGGTGTCCCCTAACTCCAAGCCCTCTCCCAACACAAAGAACCACCCCGTCC
GATTTGGGTCTGATGATGAGGGCAGATACCTAACTCAGGAACTAACAAGGTGGAGACGTACAAAGAGCA
GCCGCTCAAGACACCTGGGAAGAAAAGAAAGGCAAGCCCGGAAACGCAAGGAGCAGGAAAAGAAAAA
CGGCGAACTCGCTCTGCCTGGTTAGACTCTGGAGTGACTGGGAGTGGGCTAGAAGGGGACCACCTGTCTG
ACACCTCCACAACGTCGCTGGAGCTCGATTCACGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC212858 representing NM_002820 Red=Cloning site Green=Tags(s)
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MQRRLVQQWSVAVFLLSYAVPSCGRSVEGLSRRLKRAVSEHQLLHDKGKSIQDLRRRFFLHHLIAEIH
TAEIRATSEVSPNSKPSNTKNHPVRFQSDDEGRYLTQETNKVETYEQPLKTPGKKKKGKPGKRKEQEKK
RRTRSAWLD SGVTGSGLEGDHLSDTSTTSLELDSR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

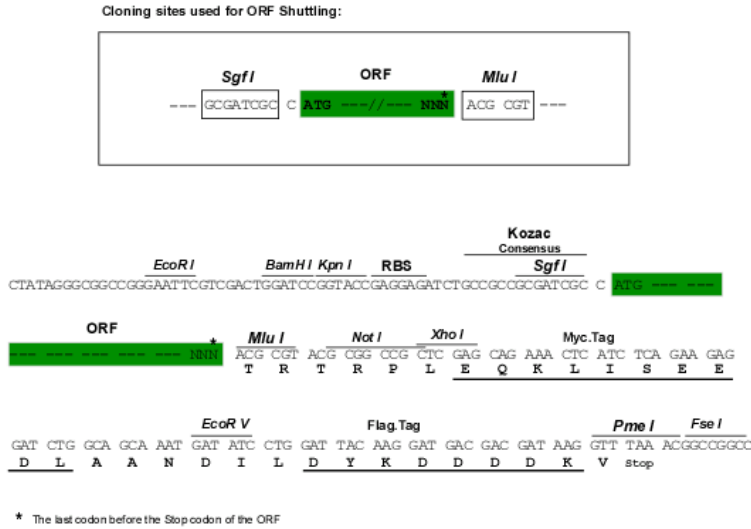
Chromatograms:	https://cdn.origene.com/chromatograms/mk6043_b09.zip
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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002820

ORF Size: 525 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_002820.2](#), [NP_002811.1](#)

RefSeq Size: 1881 bp

RefSeq ORF: 528 bp

Locus ID: 5744

UniProt ID: [P12272](#)

Cytogenetics: 12p11.22

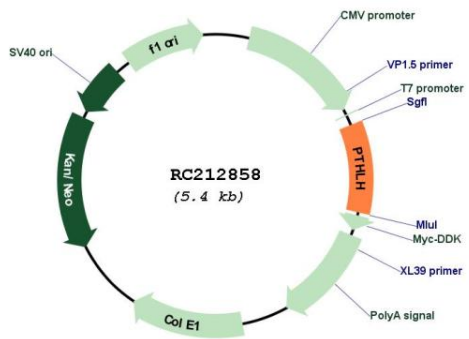
Domains: Parathyroid

Protein Families: Druggable Genome, Secreted Protein

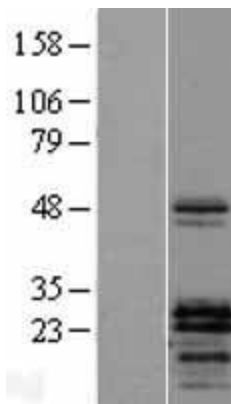
MW: 19.9 kDa

Gene Summary: The protein encoded by this gene is a member of the parathyroid hormone family. This hormone, via its receptor, PTHR1, regulates endochondral bone development and epithelial-mesenchymal interactions during the formation of the mammary glands and teeth. It is responsible for most cases of humoral hypercalcemia of malignancy, and mutations in this gene are associated with brachydactyly type E2 (BDE2). Alternatively spliced transcript variants have been found for this gene. There is also evidence for alternative translation initiation from non-AUG (CUG and GUG) start sites, downstream of the initiator AUG codon, resulting in nuclear forms of this hormone. [provided by RefSeq, Nov 2013]

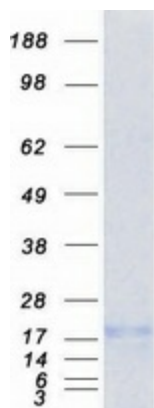
Product images:



Circular map for RC212858



Western blot validation of overexpression lysate (Cat# [LY401000]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212858 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PTHrP protein (Cat# [TP312858]). The protein was produced from HEK293T cells transfected with PTHrP cDNA clone (Cat# RC212858) using MegaTran 2.0 (Cat# [TT210002]).