

Product datasheet for RC215546

PLEKHM1 (NM_014798) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PLEKHM1 (NM_014798) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PLEKHM1
Synonyms:	AP162; B2; OPTA3; OPTB6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC215546 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGCTTTTCAGTGGTGGAGAATGGACTGGACCCCCAGGCTGCCATCCCGGTCAATCAAGAAGAAGCTGGTGG
GATCCGTGAAGGCCTTGAGAAGCAGTACGTGTCCCTGGACACGGTGGTCACTAGTGAAGACGGAGATGC
CAACACCATGTGCAGCGCCCTGGAGGCCGATTTATCCATGGCCTGCACGCCAAGCACATCCGAGCTGAG
GCCGGAGGAAAAAGGAAGAAAAGTGCCACCCAGAACCTCTGCCCCAGCCTGTCTTCTGGCCCTCCTGA
AAGCTGTACCCACAAACACATCATCTCAGAGTTGGAGCACCTGACGTTTGTCAACACGGATGTGGGCCG
CTGCCGGGCATGGCTGCGGCTGGCCCTGAACGATGGCCTGATGGAGTGCTACCTGAAGCTGCTGTCGAG
GAGCAGGCCCGCTTGCATGAGTACTACAGCCACCGCCCTGCTCCGGGATGCTGAGGAGGGCGAGTTCC
TCCTTAGCTTCTGCAGGGCCTCACGTCTTGTCTTTCGAACCTCTCTACAAGTCTGCCATCTTAAATGA
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CTGGGGCGTTAGACCAAGCGTGTGTACCTTCCCCAGGAAGAAGCAAGCCCAGGCAGCCCCATCCCAGG
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Protein Sequence:

>RC215546 protein sequence

Red=Cloning site Green=Tags(s)

MLSVVENGLDPQAAIPVIKKKLVGSVKALQKQYVSLDTVVTSEDGDANTMCSALEAVFIHGLHAKHIRAE
AGGKRKSAHQKPLPQPVFWPLKAVTHKHIISELEHLTFVNTDVGRCAWLRLALNDGLMECYLKLLQ
EQARLHEYQPTALLRDAEEGEFLLSFLQGLTSLSFELSYKSAILNEWLTPLALSGLCPLSELDPLSTS
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QEDEWVNVQYPDPQPEEPPEAPQGCLSPSDLLSEPAALQGTQFDWSSAQVPEPDAIKESLLYLMDRTWMP
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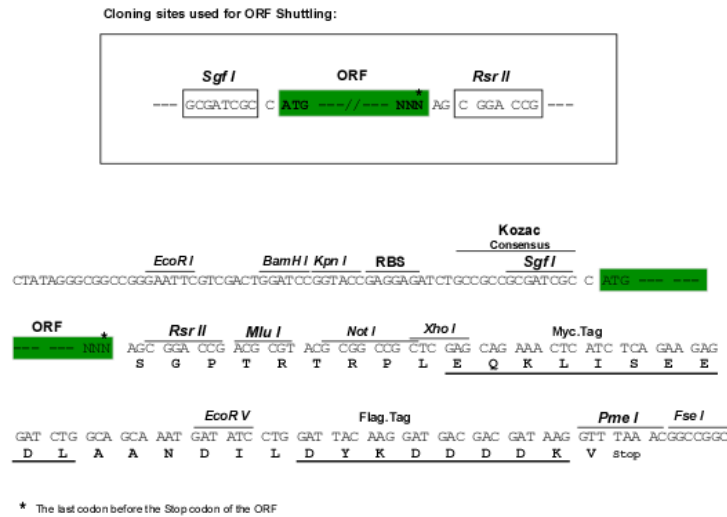
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Chromatograms:

https://cdn.origene.com/chromatograms/mk6624_a07.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_014798

ORF Size: 3168 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_014798.3](#)

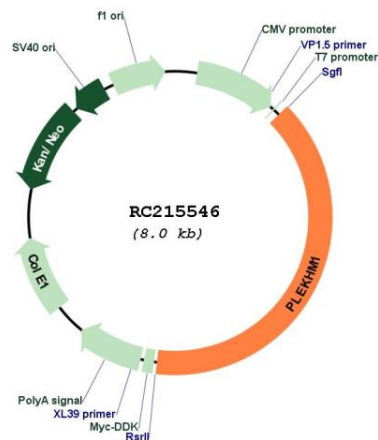
RefSeq Size: 5313 bp

RefSeq ORF: 3171 bp

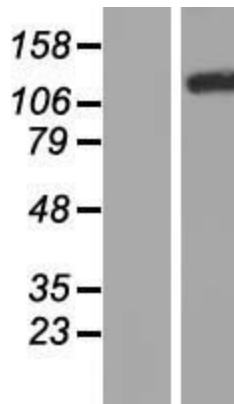
Locus ID: 9842
 UniProt ID: [Q9Y4G2](#)
 Cytogenetics: 17q21.31
 MW: 117.4 kDa

Gene Summary: The protein encoded by this gene is essential for bone resorption, and may play a critical role in vesicular transport in the osteoclast. Mutations in this gene are associated with autosomal recessive osteopetrosis type 6 (OPTB6). Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Sep 2009]

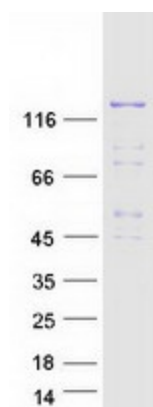
Product images:



Circular map for RC215546



Western blot validation of overexpression lysate (Cat# [LY415007]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215546 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PLEKHM1 protein (Cat# [TP315546]). The protein was produced from HEK293T cells transfected with PLEKHM1 cDNA clone (Cat# RC215546) using MegaTran 2.0 (Cat# [TT210002]).