

Product datasheet for RC205253

HPCAL4 (NM_016257) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: HPCAL4 (NM_016257) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: HPCAL4
Synonyms: HLP4
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC205253 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGGAAGACCAACAGCAAGCTGGCCCCGAGGTGCTGGAGGACCTTGTTTCAGAACACTGAGTTCAGCG
 AGCAGGAGCTGAAGCAGTGGTACAAGGGCTTCTGAAGGACTGCCAGCGGCATCTCAACCTGGAGGA
 GTTTCAGCAGCTCTACATCAAGTTCTTCCCTACGGCGACGCCTCAAGTTCGCGCAGCACGCTTCCGC
 ACCTTCGACAAGAACGGCGACGGCACCATCGACTCCGGGAGTTCATCTGCGCCCTGTCGGTACCTCCC
 GCGGCAGCTTCGAGCAGAAGCTCAACTGGCCTTTGAGATGTACGACCTGGACGGCGACGGGCGCATCAC
 GCGCTGGAGATGCTGGAGATCATCGAGGCAATCTACAAGATGGTGGCACCGTGATCATGATGCGCATG
 AACCAGGACGGGCTCACGCCAGCAGCGTGTGGACAAGATCTTCAAGAAGATGGACCAGGATAAGGACG
 ACCAGATTACATTGGAGGAGTCAAGGAGGCAGCCAAGAGTGACGCATCCATTGTGTTGCTGCTGCAGTG
 TGACATGCAGAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC205253 protein sequence
 Red=Cloning site Green=Tags(s)

MGKTNKLAPVLEDLVQNTFSEQLKQWYKGLKDCPSGILNLEEFQQLYIKFFPYGDASKFAQHAFR
 TFDKNGDGTIDFREFICALSVTSRGSFEQKLNWAFEMYDLDDGGRITRLEMLEIEAIYKMGVTVIMMRM
 NQDGLTPQQRVDKIFKKMDQDKDDQITLEEFKEAAKSDASIVLLQLQCDMQK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



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Chromatograms: https://cdn.origene.com/chromatograms/mk6313_h06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_016257

ORF Size: 573 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_016257.4](#)

RefSeq Size: 4895 bp

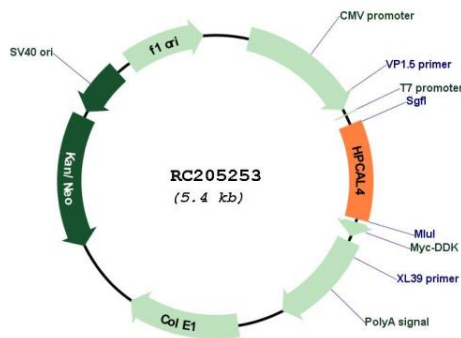
RefSeq ORF: 576 bp

Locus ID: 51440

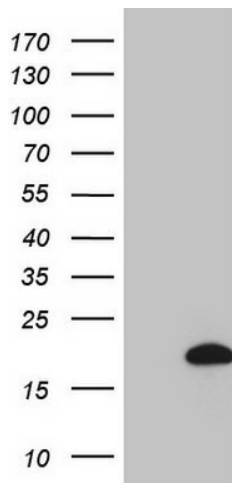
UniProt ID: [Q9UM19](#)
Cytogenetics: 1p34.2
Domains: EFh
MW: 22.2 kDa

Gene Summary: The protein encoded by this gene is highly similar to human hippocalcin protein and hippocalcin like-1 protein. It also has similarity to rat neural visinin-like Ca²⁺-binding protein-type 1 and 2 proteins. This encoded protein may be involved in the calcium-dependent regulation of rhodopsin phosphorylation. The transcript of this gene has multiple polyadenylation sites. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2013]

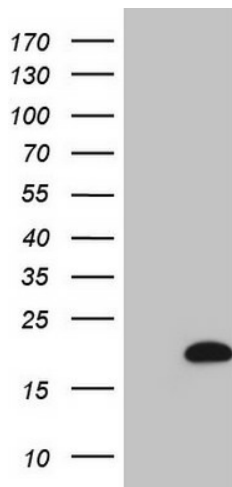
Product images:



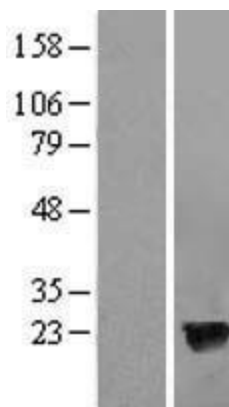
Circular map for RC205253



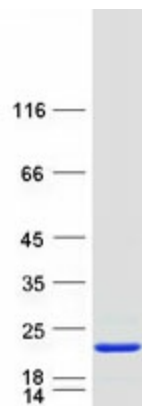
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY HPCAL4 (Cat# RC205253, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-HPCAL4 (Cat# [TA808692])(1:2000). Positive lysates [LY414097] (100ug) and [LC414097] (20ug) can be purchased separately from OriGene.



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY HPCAL4 (RC205253, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-HPCAL4 (1:2000) [TA808693]. Positive lysates [LY414097] (100ug) and [LC414097] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY414097]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205253 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HPCAL4 protein (Cat# [TP305253]). The protein was produced from HEK293T cells transfected with HPCAL4 cDNA clone (Cat# RC205253) using MegaTran 2.0 (Cat# [TT210002]).