

Product datasheet for **RC209000**

HPS4 (NM_022081) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HPS4 (NM_022081) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HPS4
Synonyms:	BLOC3S2; LE
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC209000 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCCACCTCTACCTCCACAGAGGCAAAGTCAGCCTCGTGGTGAATTATTTTTTCTTTATGATGGTT
CCAAGGTAAGGAAGAAGGCGATCCAACAAGAGCTGGCATTGTTACTTTTATCCTTCCCAGACCCTGCT
AGACCAACAGGAGTTGCTTTGTGGACAGATTGCTGGAGTTGCCGCTGTGTTTCTGACATTTCTGACTCT
CCTCCTACTCTTGTTCGCTGAGAAAAGTGAAGTTGCCATAAAAGTTGATGGAGATTACCTTTGGGTGC
TGGGCTGTGCTGTGGAGCTCCCTGATGTCAGCTGCAAGCGGTTTCTGGATCAGCTAGTTGGATTCTTTAA
TTTTTACAATGGACCTGTTCCCTAGCTTATGAGAAGTGTCTCAGGAAGAAGTGGACACGGAGTGGGAC
ACCTTCATCGAGCAAATCTGAAAAACACCAGTGTGTCATAAGATTTCAATTCCTCTGGAAGTTGG
ACCAAATAAAGTGGAGCCCTGTTGTTGCTGAAGGCAGCCCGCATTCTGCAGACCTGCCAGCGCTCACC
TCACATTCGCTGGCTGCATCCTCTATAAAGGACTGATTGTGACACCCAACTCCCGCCCTCCCTCACC
GCCAAGGTCCTGCTTACCGAACAGCACCTCAGGAGCAGAGACTCCCTACGGGAGAGGATGCCCCGAGG
AACATGGAGCGGCATTGCCCCGAATGTCCAGATTATCCCTGTTTTTGTGACAAAGAGGAAGCCATTAG
TCTCCACGAGTTCCCGGTGGAACAGATGACAAGTCTCTAGCATCTCCAGCAGGACTCCAGGATGTTTCA
GCCAGCACCATCAAAGGGTGGGAGCAGATCTGCCCTGAAAGAAAACGCCACTGGCCATGTGGAATCCA
TGGCCTGGACCACCCAGATCCCACATCCCCTGACGAAGCTTGTCCAGATGGCAGGAAGGAGAACGGATG
CTTGTCTGGCCATGATCTGGAGAGCATCAGGCCCGCAGGACTGCACAACCTGCCAGGGGTGAGGTTCTT
GGCCTCAGCTCCTCCCTGGGGAAGGAAGTGTCTTTTCTCCAAGAAGAAGTGCAGTTGTCTGAAATCCACA
TTCCAGAGGCTCAGGAAGTGGAAATGGCCTCAGGTCATTTTGCCTTCTACATGTGCCTGTTCCAGATGG
CAGGGCTCCTTACTGCAAGGCATCTCTCAGCGCCTCCAGCAGCCTGGAACCCACGCCTCCTGAGGACACA
GCCATCAGCAGCTTGCGCCCTCCCTCTGCTCCTGAGATGCTGACCCAGCATGGAGCCCAAGAGCAGCTCG
AAGACCATCCTGGCCATAGCAGCCAAGCCCCATTCCCAGAGCAGACCCTCTCCCAGAAGGACCCGCGAG
GCCCTTGTATTGCCTCGCTTAGATCCAGGACAGAGAGGAAACAAGCTTCCCACGGGGAACAAGGCCTG
GATGAGGATGTTGATGGGGTCTGTGAAAGCCACGCAGCCCTGGTCTGGAATGCAGTTCAGGCTCAGCAA
ACTGTCAGGGTGTGGCCCTCTGCAGATGGAATCAGCTCCAGGCTGACACCAGCAGAGTCTGCATGGG
GCTCGTGAGGATGAATCTCTACACTCACTGCGTCAAAGGGCTGGTGTGTCCCTGCTGGTGAGGAGCCG
CTGCTGGGAGACAGCGCAGCCATAGAGGAAGTGTACCACAGCAGCCTGGCTTCACTGAATGGGCTGGAAG
TCCACCTGAAAGAGACGCTGCCAGGGATGAGGCAGCCTCCACGAGCAGCACCTACAACCTCACATATTA
CGACCGCATTAGAGCTTGTGATGGCAAACCTGCCGCAGGTGGCCACCCCGCATGATCGCCGCTTCCCTC
CAGGCCGTGAGCCTGATGCATAGCGAATTTGCCAGCTGCCCGCCTTTATGAAATGACTGTCAGAAATG
CCTCCACGGCTGTGTACGCTGTTGCAACCCATCCAGGAGACATATTTCCAGCAGCTGGCACCTGCAGC
ACGGAGCTCCGGCTTCCAAACCTCAGGATGGCGCTTCCAGCCTCCTCCGGCAAAGCAAAGCAGAAGCTG
CTGAAGCACGGGGTGAAGTTGCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC209000 protein sequence
 Red=Cloning site Green=Tags(s)

MATSTSTEAKSASWNNYFFLYDGSKVKEEGDPTRAGICYFYPSTLLDQQELLCGQIAGVVRVSDISDS
 PPTLVRLRKLKFAIKVDGDYLWVLGCAVELPDVSCRFLDQLVGFNFYNGPVSLEYENCSEQELSTWED
 TFIIEQILKNTSDLHKIFNSLWNL DQTKVEPLLLLKAARILQTCQRSPHILAGCILYKGLIVSTQLPPSLT
 AKVLLHRTAPQEQR LPTGEDAPQE HGAALPPNVQIIPVFVTKEEAI SLHEFPVEQMTRSLASPAGLQDGS
 AQHHPKGGSTSALKENATGHVESMAWTTDPDTPSPDEACPDGRKENGCLSGHDLESIRPAGLHNSARGEVL
 GLSSSLGKELVFLQEELDLSEIHIPEAQEVEMASGHFAFLHVPVPDGRAPYCKASLSASSSLEPTPPEDT
 AISSLRPPSAPEMLTQHGAQE QLEDHPGHSSQAPIPRADPLPRTRRPLLLPRLDPGQRGNKLPTEQGL
 DEDVDGVCESHAAPGLECSSGSANCQGAGPSADGISSRLTPAESCMGLVRMNL YTHCVKGLVLSLLAEEP
 LLGDSAAIEEVYHSSLASLNGLEVHLKETLPRDEAASTSTYNFTYYDRIQSLLMANLPQVATPHDRRFL
 QAVSLMHSEFAQLPALYEMTVRNASTAVYACCNPIQETYFQQLAPAARSSGFPNPQDGFSLSGKAKQKL
 LKHGVNLL

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6155_g08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_022081

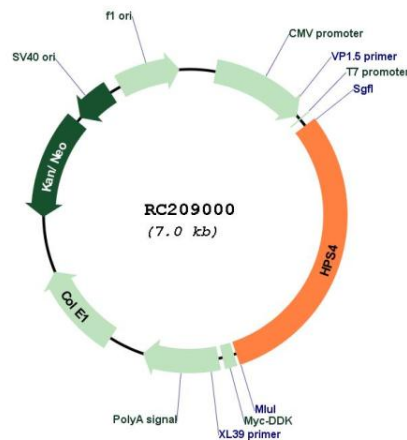
ORF Size: 2124 bp

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](#)

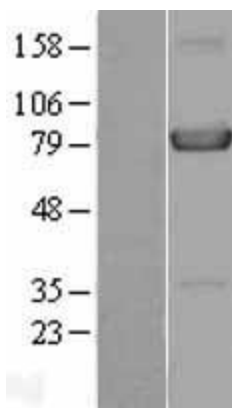
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<ol style="list-style-type: none"> 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:	<u>NM_022081.6</u>
RefSeq Size:	5161 bp
RefSeq ORF:	2127 bp
Locus ID:	89781
UniProt ID:	<u>Q9NQG7</u>
Cytogenetics:	22q12.1
MW:	77 kDa
Gene Summary:	This gene encodes a protein component of biogenesis of lysosome-related organelles complexes (BLOC). BLOC complexes are important for the formation of endosomal-lysosomal organelles such as melanosomes and platelet dense granules. Mutations in this gene result in subtype 4 of Hermansky-Pudlak syndrome, a form of albinism. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2012]

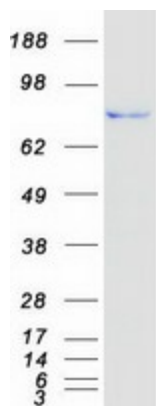
Product images:



Circular map for RC209000



Western blot validation of overexpression lysate (Cat# [LY402905]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209000 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HPS4 protein (Cat# [TP309000]). The protein was produced from HEK293T cells transfected with HPS4 cDNA clone (Cat# RC209000) using MegaTran 2.0 (Cat# [TT210002]).