

Product datasheet for **MG209628**

Hps1 (BC089331) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hps1 (BC089331) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Hps1
Synonyms:	6030422N11Rik; BB405864; ep; Gm21361; Hps
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG209628 representing BC089331
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGAAGTGCCTGTTGGTGGCCACCGAGGCGCAGAGGTCCTCTTCTACTGGACAGATGAGGAGTTTGCTG
 AGAGCCTCCGGCTGAAGCTCCAGCAGTCAGAGGATGAGGAAGAGGAGCTCCCTGTGCTGGAGGACCAGCT
 CAGCACCTCCTGGCCCCAGTCATCATCTCCTCCATGACGATGATGGAGAAGCTCTCGGACACATATACC
 TGCTTCTCAACAGAAAATGACAACCACTGTATGTCTGCATCTGTTGGAGAGTACCTGTTCTGTCGCCA
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 CCCTCTCTCAGCCCCAACGAAAAGATGTCTTCCGAGTTGGGCAAGGGGCCCTGGCTGCCTTTGTCAAAG
 CCAAGGTCTGGGCTCTGGTCCGACTGGCGCGCAGGTACCTGCAGAAGGGCTGCACCACACTGCTGTTCCA
 GGAAGGGGACTTCCGCTGCTCCTACTTCTGTGTTTCGAGAATGACATGGTGGGTGTGCCAGTCTCTGG
 GCAGGGCGGTCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG209628 representing BC089331
 Red=Cloning site Green=Tags(s)

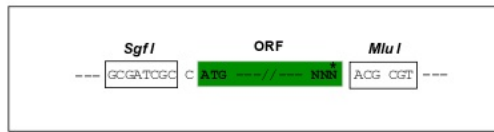
MKCVLVATEGAELFYWTDEEFAESRLRLKQQSEDEEEELPVLEDQLSTLLAPVLISSMTMEKLSDTYT
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 SALRSQPFVADLRQKMDKFIKNRVGEIQNTWLEFKSKAFSRSEPGSSWELLQVCGKLKRQLCVIYRLSF
 LVTAPSRGGPHLPQHLQDRAQKLMKERLLDWKDFLLVKSRRNVTMVSYLEDFPGLVHFIIYVDRRTGQMV
 PSLSPNEKMSELGKGPLAAAFVKAKVWALVRLARRYLQKGCTTLLFQEGDFRCSYFLWFENDMVGVP
 SLWAGRS

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI
 CTATAGGCGCGCGGAATTCGTCGACTGGATCCGGTACCGAGAGATCTGCCGCCGATCGCCGCCGCGCAGATCT
 HindIII NheI RsrII MluI NotI XhoI GFP Tag
 CAAGCTTAAGTCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC ---
 T R T R P L E M E S D - - -
 PmeI FseI
 --- GAA GAA AGA GTT TAA ACGGCCGCCGCGGAGCT
 - - E E R V Stop

ACCN: BC089331

ORF Size: 1902 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.

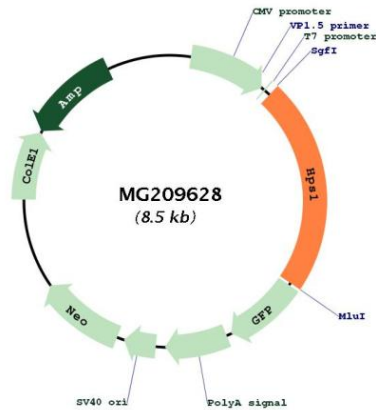
RefSeq: [BC089331](#), [AAH89331](#)

RefSeq Size: 4235 bp

RefSeq ORF: 1904 bp

Locus ID:	192236
Cytogenetics:	19 36.56 cM
Gene Summary:	Component of the BLOC-3 complex, a complex that acts as a guanine exchange factor (GEF) for RAB32 and RAB38, promotes the exchange of GDP to GTP, converting them from an inactive GDP-bound form into an active GTP-bound form. The BLOC-3 complex plays an important role in the control of melanin production and melanosome biogenesis and promotes the membrane localization of RAB32 and RAB38.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG209628