

Product datasheet for **RG207124**

HPS2 (AP3B1) (NM_003664) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: HPS2 (AP3B1) (NM_003664) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: HPS2
Synonyms: ADTB3; ADTB3A; HPS; HPS2; PE
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG207124 representing NM_003664
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTCCAGCAATAGTTTTCTTACAATGAGCAGTCCGGAGGAGGGAGGCGACGGAGCTGGGTGAGGAGG
 CGACCTCAACATTTCCCCTCGGGGCCCTTCGGCCTCTTAGCAGCGATTTGAAGAAGAATGAAGATCT
 AAAGCAAATGTTAGAGAGCAACAAAGATTCTGCTAAACTGGATGCTATGAAGCGGATTGTTGGGATGATT
 GCAAAAAGGAAAAATGCATCTGAACTGTTTCTGCTGTTGTGAAGAATGTGGCCAGTAAAAATATTGAGA
 TCAAGAAGTTGGTATATGTTTACCTGGTTCGATATGCTGAAGAACAGCAGGATCTTGCACCTCTGCCAT
 AAGCACTTTTCAGCGAGCTCTGAAGGACCCAAACCAACTAATTCGTGCAAGCGCTTTGAGAGTTCTGTCA
 AGTATTAGAGTGCCAATTATTGTACCTATCATGATGCTTGCTATTAAGGAAGCTTCTGCTGACTTATCAC
 CATATGTTAGGAAGAATGCAGCCATGCAATACAAAAATTATACAGCCTTGATCCAGAGCAGAAGGAAAT
 GTTAATTGAAGTAATTGAAAACTTCTGAAAGATAAAAGCACATTGGTAGCTGGCAGTGTGTGATGGCT
 TTTGAAGAAGTATGCCCGGACAGAATAGATCTGATTCATAAAAAATACCGCAAGCTATGTAACCTACTAG
 TGGATGTTGAAGAGTGGGGCAGGTTGCATAATCCACATGCTAACTCGATATGCTCGGACACAGTTTGT
 CAGCCCTTGAAAAGAGGGTGTGAATTAGAAGACAATGAAAAGATTTCTACGAATCTGATGATGATCAG
 AAGGAAAAGACTGACAAAAAGAAGCCGTATACTATGGATCCAGATCATAGACTCTTAATTAGAATA
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 TATATTGCTACAAAATATAGCAACTATGTCAATTCAAAGAAAGGGGATGTTTGAACCTTATCTGAAGA
 GTTTCTATGTTAGGTCAACTGATCCAATGATCAAGACACTGAAGCTTGAAATTTTGACAACTTGGC
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 ATTACTGCAATGCAACCTGCACAACATGGTGAATTTAAACATATGGCCAACTCCTGGACAGTATC



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ACTGTTCTGTTGCTAGAGCAAGTATTCTTTGGCTAATTGGAGAAAAGTGAACGAGTTCCTAAAATTG
 CCCCTGATGTTTTGAGGAAGATGGCTAAAAGCTTCACTAGTGAAGATGATCTGGTAAAAGTGCAGATATT
 AAATCTGGGAGCAAAATTGTATTTAACCAACTCCAAACAGACAAAATTGCTTACCAGTACATATTTAAAT
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 GAAGTCTTTTACCTGTGGCCATGTGAGAGAAAGATTTTAAAGAAAGCAAGGAGTGTAAACAGGAATGT
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 AAATGTAGCCAATGTAGGTGCACTCCCTTCTGGCCAGGATAATATACACAGGTTTGCAGCTAAAAGTGTG
 CACAGTGGGTATTGATGCTAGTACAGTGGAAGTGAAGGAAGGCTCTACAGCCAGCTTATCATAAACA
 CTGAGAAAAGTGTATTGGCTCTGTTCTGCTGCGGAACTGAAGCCTGTCTGTCTCAGGGG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG207124 representing NM_003664
 Red=Cloning site Green=Tags(s)

MSSNSFPYNEQSGGGEATELGQEATSTISPSGAFGLFSSDLKKNEDLKQMLESNKDSAKLDAMKRIVGMI
 AKGKNASELFPAYVKNVASKNIEIKKLVVYVLRVYAEQQDLALLSISTFQRALKDPNQLIRASALRVLS
 SIRVPIIVPIMMLAIKEASADLSPYVRKNAHAHQKLYSLDPEQKEMLIEVIEKLLKDKSTLVAGSVVMA
 FEEVCPDRIDLHKNYRKL CNLLVDVEEWGQVVIHMLTRYARTQFVSPWKEGDELEDNGKNFYESSDDQ
 KEKTDKPKPYTMDPHRLLIRNTKPLQSRNAAVVMAVAQLYWHISPKSEAGIISKSLVRLLRNREVQ
 YIVLQNIATMSIQRKGMEPYLKSFYVVRSTDPMTIKTLKLEILTNLANEANISTLLREFQTYVKSQDKQF
 AAATIQTIGRCATNILEVTDTCNLGLVCLLSNRDEIVVAESVVVVKLLQMQPAQHGEI IKHMAKLLDSI
 TVPVARASILWLI GENCERVPKIAPDVL RKMASF TSEDDL VKLQILNLGAKLYLTNSKQTKLLTQYILN
 LGKYDQNYDIRDRTRFIRQLI VPNEKSGALSKYAKKIFLAQKPAPLLESPFKDRDHFQLGTL SHTLN IKA
 TGYLELSNWPEVAPDPSVRNVEVIELAKEWTPAGKAKQENS AKKFYSESEEEEDSSDSSDSESESGSES
 GEQGESGEEGDSNEDSSDSSSEQDSESGRESGLENKRTAKRNSKAKGKSDSEGEKENEKSKTSDSSND
 ESSSIDSSDSESESEPESESESRVTKKEKKTQDRTP LTKDVSLLDLD DFNVPVSTPVALPTPALSP
 SLMADLEGLHLSTSSSVISVSTPAFVPTKTHVLLHRMSGKGLAAHYFFPRQPCIFGDKMYSIQITLNNTT
 DRKIENIHIGEKKLP IGMKMHVFNPIDSLPEGSITVSMGIDFCDSTQTASFQLCTKDDCFVNIQPPVG
 ELLL PVAMSEKDFKKEQGLTGMNETSAVIAAPQNFTPSVIFQKVVNVANVAVPSGDNIHRFAAKTV
 HSGSLMLVTVELKEGSTAQLIINTEKTVIGSVLLRELKPVLSQG

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_003664

ORF Size: 3282 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_003664.2](#)

RefSeq Size: 4009 bp

RefSeq ORF: 3285 bp

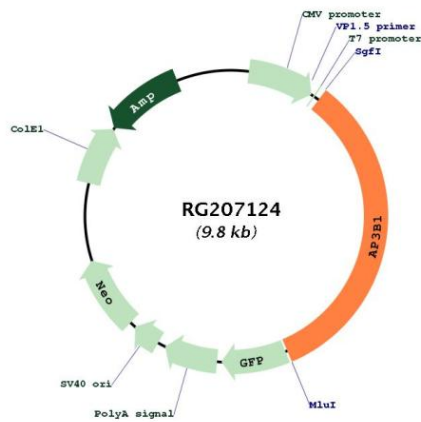
Locus ID: 8546

UniProt ID: [O00203](#)

Cytogenetics: 5q14.1
Domains: Adaptin_N
Protein Pathways: Lysosome

Gene Summary: This gene encodes a protein that may play a role in organelle biogenesis associated with melanosomes, platelet dense granules, and lysosomes. The encoded protein is part of the heterotetrameric AP-3 protein complex which interacts with the scaffolding protein clathrin. Mutations in this gene are associated with Hermansky-Pudlak syndrome type 2. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2012]

Product images:



Circular map for RG207124