

## Product datasheet for **RC235138**

### HPS2 (AP3B1) (NM\_001271769) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** HPS2 (AP3B1) (NM\_001271769) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** AP3B1  
**Synonyms:** ADTB3; ADTB3A; HPS; HPS2; PE  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RC235138 representing NM\_001271769  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGTTAGAGAGCAACAAAGATTCTGCTAACTGGATGCTATGAAGCGGATTGTTGGGATGATTGCAAAAG  
GGAAAAATGCATCTGAAGTGTTCCTGCTGTTGTGAAGAATGTGGCCAGTAAAAATTTGAGATCAAGAA  
GTTGGTATATGTTTACCTGGTTCGATATGCTGAAGAACAGCAGGATCTTGCACTCCTGTCCATAAGCACT  
TTTCAGCGAGCTCTGAAGGACCCAAACCACTAATTCGTGCAAGCGCTTTGAGAGTTCTGTCAAGTATTA  
GAGTGCCAAATTATTGTACCTATCATGATGCTTGCTATTAAAGGAAGCTTCTGCTGACTTATCACCATATGT  
TAGGAAGAATGCAGCCATGCAATACAAAAATTATACAGCCTTGATCCAGAGCAGAAGGAAATGTTAATT  
GAAGTAATTGAAAACTTCTGAAAGATAAAAGCACATTGGTAGCTGGCAGTGTGTGATGGCTTTTGAAG  
AAGTATGCCCGGACAGAATAGATCTGATTCATAAAAAATTACCGCAAGCTATGTAACCTACTAGTGGATGT  
TGAAGAGTGGGGCAGGTTGTCATAATCCACATGCTAACTCGATATGCTCGGACACAGTTTGTGAGCCCT  
TGGAAAGAGGGTGATGAATTAGAAGACAATGAAAGAATTTCTACGAATCTGATGATGATCAGAAGGAAA  
AGACTGACAAAAAGAAGAAGCCGTACTATGGATCCAGATCATAGACTCTTAATTAGAAAATACAAAGCC  
TTTGCTTCAGAGCAGGAATGCTGCGGTGGTTATGGCAGTTGCTCAGCTGTATTGGCACATATCACAAAA  
TCTGAAGCTGGCATAATTTCTAAATCACTAGTGCCTTACTTCGTAGCAATAGGGAGGTGACGATATTTG  
TCCTACAAAAATAGCAACTATGTCAATCAAAGAAAGGGGATGTTTGAACCTTATCTGAAGAGTTTCTA  
TGTTAGGTCAACTGATCCAATATGATCAAGACACTGAAGCTTGAATTTTGAACAACTGGCAAAATGAA  
GCCAACATATCAACTCTTCTCGAGAATTTAGACCTATGTGAAAAGCCAGGATAAAACAATTTGCAGCAG  
CCACTATTCAGACTATAGGCAGATGTGCAACCAACATCTTGAAGTCACTGACACGTGCCTCAATGGCTT  
GGTCTGTCTGCTCCAACAGGGATGAAATAGTTGTTGCTGAAAGTGTGGTTGTTATAAAGAAATTAAGT  
CAAATGCAACCTGCACAACATGGTGAATTAATAACATATGGCCAACTCCTGGACAGTATCACTGTTC  
CTGTTGCTAGAGCAAGTATTCTTTGGCTAATTGGAGAAAAGTGTGAACGAGTTTCTAAAATTTGCCCTGA  
TGTTTTGAGGAAGATGGCTAAAAGCTTCACTAGTGAAGATGATCTGGTAAAAGTGCAGATATTAATCTG  
GGAGCAAAATGTATTTAACCACTCCAACAGACAAAATTTGCTTACCCAGTACATATTAATCTCGGCA



[View online »](#)

AGTATGATCAAACTACGACATCAGAGACCGTACAAGATTTATTAGGCAGCTTATTGTTCCGAATGTAAA  
 GAGTGGAGCTTTAAGTAAATATGCCAAAAAATATTCCTAGCACAAAAGCCTGCACCAGCTGTTGAGTCT  
 CCTTTTAAAGATAGAGATCATTTCAGCTTGGCACCTTATCTCATACTCTCAACATTAAGCTACTGGGT  
 ACCTGGAATTATCTAATTGGCCAGAGGTGGCGCCGACCCATCAGTTCGAAATGTAGAAGTAATAGAGTT  
 GGCAAAAGAAATGGACCCAGCAGGAAAAGCAAAGCAAGAGAATTCTGCTAAGAAGTTTTATTCTGAATCT  
 GAGGAAGAGGAGGACTCTTCTGATAGTAGCAGTGACAGTGAGAGTGAATCTGGAAGTGAAGTGGAGAAC  
 AAGGCGAAAGTGGGAGGAAGGAGACGCAATGAGGACAGCAGTGAGGACTCCTCCAGTGACGAGGACAG  
 TGAGAGTGGACGGGAGTCAAGCCTAGAAAAACAAAAGAACAGCCAAGAGGAACTCAAAGCCAAAGGAAAA  
 AGTGATTCTGAAGATGGGAGAAGGAAAATGAAAAATCTAAAACCTCAGATTCTTCAAATGACGAATCTA  
 GTTCAATAGAAGACAGTTCTTCCGATTCTGAATCAGAGTCAGAACCTGAAAGTGAATCTGAATCCAGAAG  
 AGTCACTAAGGAGAAAAGAAAAGAAAACAAAGCAAGATAGAAGTCTCTTACCAAAGATGTTTCACTTCTA  
 GATCTGGATGATTTTAAACCCAGTATCCACTCCAGTTGCACTTCCCACACCAGCTCTTTCTCCAAGTTTGA  
 TGGCTGATCTTGAAGTTTACACTTGTCAACTTCTCTTCACTCATCAGTGCAGTACTCCTGCATTTGT  
 ACCAACGAAAACCTCAGTGTCTTTCATCGAATGAGTGGAAAAGGACTAGCTGCCATTATTTCTTTCCA  
 AGACAGCCTTGCATTTTTGGTGATAAGATGGTCTCTATACAAATAACACTGAATAACACTACTGATCGAA  
 AGATAGAAAATATCCACATAGGGGAAAAAATCTCTATAGGCATGAAAATGCATGTTTTTAATCCAAT  
 AGACTCTCTTGAGCCTGAGGGATCCATTACAGTTTCAATGGGTATTGACTTTTGTGATTCTACTCAGACT  
 GCCAGTTTCCAGTTGTGTACCAAGGATGATTGCTTCAATGTTAATATTCAGCCACCTGTTGGAGAAGTGC  
 TTTTACCTGTGGCCATGTCAGAGAAAGATTTAAGAAAAGAGCAAGGAGTCTAACAGGAATGAATGAAAC  
 TTCTGTGTAATCATTGCTGCACCACAGAAATTTCACTCCCTCTGTGATCTTTCAGAAGGTTGTAATGTA  
 GCCAATGTAGGTGAGTCCCTTCTGGCCAGGATAATATACACAGGTTTGCAGCTAAAACCTGTGCACAGTG  
 GGTCATTGATGCTAGTCACAGTGAAGTGAAGGAAGGCTCTACAGCCAGCTTATCATAAACACTGAGAA  
 AACTGTGATTGGCTCTGTTCTGCTGCGGAACTGAAGCCTGTCTGTCTCAGGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC235138 representing NM\_001271769  
 Red=Cloning site Green=Tags(s)

MLESNKDSAKLDAMKRIVGMIKGNASELFPVAVKKNVASKNIEIKKLVVYVYLVRVYAEQQDLALLSIST  
 FQRALKDPNQLIRASALRVLSSIRVPIIVPIMMLAIKEASADLSPYVRKNAAHAIQKLYSLDPEQKEMLI  
 EVIEKLLKDKSTLVAGSVVMAFEEVCPDRIDLHKNYRKLGNLLVDVEEWGQVVIHMLTRYARTQFVSP  
 WKEGDELEDNGKNFYESDDQKEKTDKPKPYTMDPDHRLLRNTKPLLQSRNAAVVMAVAQLYWHISPK  
 SEAGIISKSLVRLLRNREVQYIVLQNIATMSIQKGMFEPYLSFYVVRSDPTMIKTLKLEILTNLANE  
 ANISTLLREFQTYVKSQDKQFAAATIQTIGRCATNILEVTDTCNLGLVCLLSNRDEIVVAESVVVIKLL  
 QMQPAQHGEIHKMAKLLDSITVVARASILWLGENCERVPKIAPDVLKMAKSFSEDDLKVLQILNL  
 GAKLYLTNSKQTKLLTQYILNLGKYDQNYDIRDRTRFIRQLIVPNVKS GALSKYAKKIFLAQKPAPLLES  
 PFKDRDHFQLGTLSHLNIKATGYLELSNWPEVAPDPSVRNVEIELAKEWTPAGKAKQENSACKFYSES  
 EEEEDSSDSSDSESESGSESGEQGESGEEGDSNEDSSSEQDSESGRESGLENKRTAKRNSKAKGK  
 SDESDEGEKENEKSKTSDSSNDESSSIEDSSDSESESEPESESESRRVTKKEKKTKQDRTPLTKDVSLL  
 DLDDFNPVSTPVALPTPALSPSLMADLEGLHLSTSSSVISVSTPAFVPTKTHVLLHRMSGKGLAAHYFFP  
 RQPCIFGDKMVS IQITLNTTDRKIENIHI GEKKLPIGKMHVFNPIDSLPEGSITVSMGIDFCSTQT  
 ASFQLCTKDDCFNVNIQPPVGELLLPVAMSEKDFKKEQGLTGMNETSAVIAAPQNFTPSVIFQKVVNV  
 ANVGAVPSGQDNIHRFAAKTVHSGSLMLVTVELKEGSTAQLIINTEKTVIGSVLLRELKPVLSQG

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

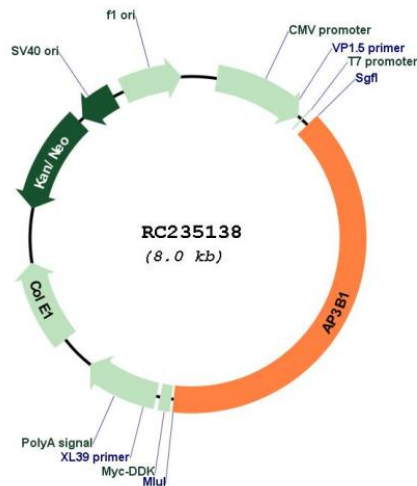
**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN:

NM\_001271769

ORF Size:

3135 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](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001271769.2</a>
<b>RefSeq Size:</b>	4072 bp
<b>RefSeq ORF:</b>	3138 bp
<b>Locus ID:</b>	8546
<b>UniProt ID:</b>	<a href="#">O00203</a>
<b>Cytogenetics:</b>	5q14.1
<b>Protein Pathways:</b>	Lysosome
<b>MW:</b>	116.6 kDa
<b>Gene Summary:</b>	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]