

## Product datasheet for **RG235138**

### 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:	TurboGFP
Symbol:	AP3B1
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:	>RG235138 representing NM_001271769 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTTAGAGAGCAACAAAGATTCTGCTAACTGGATGCTATGAAGCGGATTGTTGGGATGATTGCAAAAG  
GGAAAAATGCATCTGAAGTCTGCTGTTGTGAAGAATGTGGCCAGTAAAAATTTGAGATCAAGAA  
GTTGGTATATGTTTACCTGGTTCGATATGCTGAAGAACAGCAGGATCTTGCACTCCTGTCCATAAGCACT  
TTTCAGCGAGCTCTGAAGGACCCAAACCACTAATTCGTGCAAGCGCTTTGAGAGTTCTGTCAAGTATTA  
GAGTGCCAATTATTGTACCTATCATGATGCTTGTCTATTAAGGAAGCTTCTGCTGACTTATCACCATATGT  
TAGGAAGAATGCAGCCATGCAATACAAAAATTATACAGCCTTGATCCAGAGCAGAAGGAAATGTTAATT  
GAAGTAATTGAAAACTTCTGAAAGATAAAAGCACATTGGTAGCTGGCAGTGTTGTGATGGCTTTTGAAG  
AAGTATGCCCGGACAGAAATAGATCTGATTCATAAAAAATTACCGCAAGCTATGTAACCTACTAGTGGATGT  
TGAAGAGTGGGGGAGGTTGTCATAATCCACATGCTAACTCGATATGCTCGGACACAGTTTGTGAGCCCT  
TGGAAAGAGGGTGATGAATTAGAAGACAATGGAAGAATTTCTACGAATCTGATGATGATCAGAAGGAAA  
AGACTGACAAAAAGAAGAAGCCGTATACTATGGATCCAGATCATAGACTCTTAATTAGAAATACAAAGCC  
TTTGCTTCAGAGCAGGAATGCTGCGGTGGTTATGGCAGTTGCTCAGCTGTATTGGCACATACACAAAA  
TCTGAAGCTGGCATAATTTCTAAATCACTAGTGCCTTACTTCGTAGCAATAGGGAGGTGCAGTATATTG  
TCCTACAAAAATAGCAACTATGCAATTCAAAGAAAGGGGATGTTTGAACCTTATCTGAAGAGTTTCTA  
TGTTAGTCAACTGATCCAATATGATCAAGACACTGAAGCTTGAATTTTGACAACTTGGCAAAATGAA  
GCCAACATATCAACTCTTCTCGAGAATTTGAGACCTATGTGAAAAGCCAGGATAAAACAATTTGACAGCAG  
CCACTATTCAGACTATAGGCAGATGTGCAACCAACATCTTGAAGTCACTGACACGTGCCTCAATGGCTT  
GGTCTGTCTGCTCCAACAGGGATGAAATAGTTGTTGCTGAAAGTGTGGTTGTTATAAAGAAATTAAGT  
CAAATGCAACCTGCACAACATGGTGAATTTAAACATATGGCCAACTCCTGGACAGTATCACTGTTC  
CTGTTGCTAGAGCAAGTATTCTTTGGCTAATTGGAGAAAAGTGTGAACGAGTTCTAAAATTTGCCCTGA  
TGTTTTGAGGAAGATGGCTAAAAGCTTCACTAGTGAAGATGATCTGGTAAAAGTGCAGATATTAATCTG



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GGAGCAAATTTGATTTAACCAACTCCAAACAGACAAAATTGCTTACCCAGTACATATTAATCTCGGCA  
 AGTATGATCAAACTACGACATCAGAGACCGTACAAGATTTATTAGGCAGCTTATTGTTCCGAATGTAAA  
 GAGTGGAGCTTTAAGTAAATATGCCAAAAAATATTCTAGCACAAAAGCCTGCACCAGTCTTGTAGTCT  
 CCTTTTAAAGATAGAGATCATTTCAGCTTGGCACCTTATCTCATACTCTCAACATTAAGCTACTGGGT  
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 AAGGCGAAAAGTGGGGAGGAAGGAGACAGCAATGAGGACAGCAGTGAGGACTCCTCCAGTGCAGGACAG  
 TGAGAGTGGACGGGAGTCAAGCCTAGAAAAAAAAGAACAGCCAAGAGGAACTCAAAAGCCAAAGGAAAA  
 AGTGATTCTGAAGATGGGGAGAAGGAAAATGAAAAATCTAAAACCTCAGATTCTTCAAATGACGAATCTA  
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 AGTCACTAAGGAGAAAAGAAAAGAAAACAAGCAAGATAGAACTCCTCTTACCAAAGATGTTTCACCTCTA  
 GATCTGGATGATTTTAAACCAGTATCCACTCCAGTTGCACTTCCACACCAGCTCTTCTCCAAGTTTGA  
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 AGACAGCCTTGCATTTTTGGTGATAAGATGGTCTCTATACAAATAACACTGAATAACACTACTGATCGAA  
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 AGACTCTCTTGAGCCTGAGGGATCCATTACAGTTTCAATGGGTATTGACTTTTGTGATTCTACTCAGACT  
 GCCAGTTTCCAGTTGTGTACCAAGGATGATTGCTTCAATGTTAATATTACGCCACCTGTTGGAGAAGTGC  
 TTTTACCTGTGGCCATGTGAGAGAAAGATTTAAGAAAGAGCAAGGAGTGTCTAACAGGAATGAATGAAAC  
 TTCTGTGTAATCATTGCTGCACCACAGAAATTTCACTCCCTCTGTGATCTTTCAGAAGGTTGTAATGTA  
 GCCAATGTAGGTGAGTCCCTTCTGGCCAGGATAATATACACAGGTTTGCAGCTAAAACCTGTGCACAGTG  
 GGTCATTGATGCTAGTCACAGTGAAGTGAAGGAAGGCTCTACAGCCAGCTTATCATAAACTGAGAA  
 AACTGTGATTGGCTCTGTTCTGCTGCGGAACTGAAGCCTGTCTGTCTCAGGG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG235138 representing NM\_001271769  
 Red=Cloning site Green=Tags(s)

MLESNKDSAKLDAMKRIVGMIKGNASELFPVAVKNVASKNIEIKKLVVYVYLVRVYAEQQDLALLSIST  
 FQRALKDPNQLIRASALRVLSSIRVPIIVPIMMLAIKEASADLSPYVRKNAAHAIQKLYSLDPEQKEMLI  
 EVIEKLLKDKSTLVAGSVVMAFEEVCPDRIDLHKNYRKLGNLLVDVEEWGQVVIHMLTRYARTQFVSP  
 WKEGDELEDNGKNFYESDDQKEKTDKPKPYTMDPDHRLLRNTKPLLQSRNAAVVMAVAQLYWHISPK  
 SEAGIISKSLVRLLRNREVQYIVLQNIATMSIQKGMFEPYLSFYVVRSDPTMIKTLKLEILTNLANE  
 ANISTLLREFQTYVKSQDKQFAAATIQTIGRCATNILEVTDTCNLGLVCLLSNRDEIVVAESVVVIKLL  
 QMQPAQHGEIIKHMAKLLDSITVVARASILWLGENCERVPKIAPDVLKMAKSFSTSEDDLKVLQILNL  
 GAKLYLTNSKQTKLLTQYILNLGKYDQNYDIRDRTRFIRQLIVPNVKS GALSKYAKKIFLAQKPAPLLES  
 PFKDRDHFQLGTLSHTLNIKATGYLELSNWPEVAPDPSVRNVEVIELAKEWTPAGKAKQENSACKFYSES  
 EEEEDSSDSSDSESESGSESGEQGESGEEGDSNEDSSSEQDSESGRESGLENKRTAKRNSKAKGK  
 SDESDEGEKENEKSKTSDSSNDESSIEDSSDSESESEPESESESRRVTKKEKKTQDRTPLTKDVSLL  
 DLDDFNPVSTPVALPTPALSPSMLADLEGLHLSTSSSVISVSTPAFVPTKTHVLLHRMSGKGLAAHYFFP  
 RQPCIFGDKMVSIIQITLNTTDRKIENIHI GEKKLPIGMMHVFNPIDSLEPEGSITVSMGIDFCDSTQT  
 ASFQLCTKDDCFNVNIQPPVGELLLPVAMSEKDFKKEQGLTGMNETSAVIAAPQNFPTPSVIFQKVVNV  
 ANVGAVPSGQDNIHRFAAKTVHSGSLMLVTVELKEGSTAQLIINTEKTVIGSVLLRELKPVLSQG

TRTRPLE – GFP Tag – V

**Restriction Sites:**

SgfI-MluI



<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>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]