

## Product datasheet for **RG224136**

### SCUBE2 (NM\_020974) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SCUBE2 (NM_020974) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SCUBE2
Synonyms:	CEGB1; CEGF1; CEGP1; scube/You
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG224136 representing NM\_020974  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGGGTTCGCGGGCCGCAACCGTCCCGGGCGGCTGGCGGTGCTGCTGCTGCTGCTGCTGCCG  
 CACTGCTGCTGCTGGCGGGGCCGTCCCGCGGGTCGGGGCCGTGCCCGGGGCCAGGAGGATGTAGA  
 TGAGTGTGCCAAGGGCTAGATGACTGCCATGCCGACGCCCTGTGTCAGAACACACCCACCTCCTACAAG  
 TGCTCCTGCAAGCCTGGTACCAAGGGGAAGCAGGCAGTGTGAGGACATCGATGAATGTGAAATGAGC  
 TCAATGGAGGCTGTGCCATGACTGTTTGAATATTCCAGGCAATTATCGTTGCACTTGTTTTGATGGCTT  
 CATGTTGGCTCATGACGGTCATAATTGTCTTGATGTGGACGAGTGCCTGGAGAACAATGGCGCTGCCAG  
 CATACTGTGTCAACGTCATGGGAGCTATGAGTGTGCTGCAAGGAGGGTTTTCTGAGTGACAATC  
 AGCACACCTGCATTCACCGCTCGGAAGAGGGCCTGAGCTGCATGAATAAGGATCACGGCTGTAGTCAT  
 CTGCAAGGAGGCCCAAGGGCAGCGTCGCTGTGAGTGCAGGCCTGGTTTTGAGCTGGCCAAGAACCAG  
 AGAGACTGCATCTTGACCTGTAACCATGGGAACGGTGGTGCCAGCACTCCTGTGACGATACAGCCGATG  
 GCCCAGAGTGCAGCTGCCATCCACAGTACAAGATGCACACAGATGGGAGGAGCTGCCTTGAGCGAGAGGA  
 CACTGTCTGGAGGTGACAGAGACAACACCACATCAGTGGTGGATGGGGATAAACCGGTGAAACGGCGG  
 CTGCTCATGGAACGTGTGCTGTCAACAATGGAGGCTGTGACCGCACCTGTAAGGATACTTCGACAGGTG  
 TCCACTGCAGTTGCTGTTGGATTCACTCTCCAGTTGGATGGGAAGACATGTAAGATATTGATGAGTG  
 CCAGACCCGCAATGGAGGTTGTGATCATTTCTGCAAAAACATCGTGGCAGTTTTGACTGCGGCTGCAAG  
 AAAGGATTTAAATTTAACAGATGAGAAGTCTTGCCAAGATGTGGATGAGTGTCTTTGGATAGGACCT  
 GTGACCACAGCTGCATCAACCACCTGGCACATTTGCTGTGCTTCAACCGAGGTACACCTGTATGG  
 CTTACCCCACTGTGGAGACACCAATGAGTGCAGCATCAACAACGGAGGCTGTGAGCAGGCTGTGTGAAC  
 ACAGTGGCAGCTATGAATGCCAGTCCACCCTGGGTACAAGCTCCACTGGAATAAAAAAGACTGTGTGG  
 AAGTGAAGGGGCTCCTGCCACAAGTGTGTACCCCGTGTGTCCCTGCACTGCGGTAAGAGTGGTGGAGG  
 AGACGGGTGCTTCTCAGATGTCACTCTGGCATTACCTCTTTCAGATGTACCACCATCAGGACAAGT  
 GTAACCTTTAAGCTAAATGAAGGCAAGTGTAGTTTAAAAATGCTGAGCTGTTTCCCGAGGGTCTGCGAC  
 CAGCACTACCAGAGAAGCACAGCTCAGTAAAAGAGAGCTTCCGCTACGTAACCTTACATGCAGCTCTGG  
 CAAGCAAGTCCCAGGAGCCCTGGCCGACCAAGCACCCCTAAGGAAATGTTTATCACTGTTGAGTTTGAG  
 CTTGAAACTAACCAAAAGGAGGTGACAGCTTCTGTGACCTGAGCTGCATCGTAAAGCGAACCGAGAAGC  
 GGTCCGTAAAGCCATCCGCACGCTCAGAAAGGCCGTCCACAGGGAGCAGTTTCACTCCAGCTCTCAGG  
 CATGAACCTCGACGTGGCTAAAAAGCCTCCAGAACATCTGAACGCCAGGCAGAGTCTGTGGAGTGGGC  
 CAGGGTGCATGCAGAAAACCAATGTGTGAGTGCAGGGCTGGGACCTATTATGATGGAGCACGAGAACGCT  
 GCATTTTATGTCCAAATGGAACCTTCCAAAATGAGGAAGGACAAATGACTTGTGAACCATGCCAAAGACC  
 AGGAAATTTGGGGCCCTGAAGACCCAGAAAGCTTGAATATGTCTGAATGTGGAGGTCTGTGTCAACCT  
 GGTGAATATTCTGCAGATGGCTTTGCACCTTCCAGCTCTGTGCCCTGGGCAGTTCACGCTGAAGCTG  
 GTCGAACCTCTGCTTCCCTGTGGAGGAGGCCTTCCACCAACATCAGGGAGCTACTTCTTTTCAGGA  
 CTGTGAAACCAGAGTTCAATGTTACCTGGACATTTCTACAACACCACCACTCACCGATGATTCTGTTGC  
 CCAGTGGGAACATACCAGCCTGAATTTGGAAAAAATAATTGTGTTTCTTGCCAGGAAATACTACGACTG  
 ACTTTGATGGCTCCACAAACATAACCCAGTGTA AAAACAGAAGATGTGGAGGGGAGCTGGGAGATTTAC  
 TGGGTACATTGAATCCCCAACTACCCAGGCAATTACCCAGCCAACACCGAGTGTACGTGGACCATCAAC  
 CCACCCCAAGCGCCGATCCTGATCGTGGTCCCTGAGATCTTCTGCCATAGAGGACGACTGTGGGG  
 ACTATCTGGTGTGCGGAAAACCTTTCATCCAATTCTGTGACAACATATGAAACCTGCCAGACCTACGA  
 ACGCCCCATCGCCTTACCTCCAGGTCAAAGAAGCTGTGGATTCAAGTCCAATGAAGGGAACAGC  
 GCTAGAGGGTTCAGGTCCATACGTGACATATGATGAGGACTACCAGGAACTCATTGAAGACATAGTTC  
 GAGATGGCAGGCTCTATGCATCTGAGAACCATCAGGAAATACTTAAGGATAAGAACTTATCAAGGCTCT  
 GTTTGATGCTCCTGGCCATCCCCAGAACTATTTCAAGTACACAGCCAGGAGTCCCGAGAGATGTTTCCA  
 AGATCGTTTCATCCGATTGCTACGTTCCAAGTGTCCAGGTTTTTGGACCTTACAAA

**ACGCGT**ACGCGGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG224136 representing NM\_020974  
Red=Cloning site Green=Tags(s)

```

MGVAGRNRPGAAWAVLLLLLLLLPLLLLLAGAVPPGRGRAAGPQEDVDECAQGLDDCHADALCQNTPTS
YKCSCKPGYQGEGRQCEDIIDECGNELNGGCVHDCLNIPGNYRCTCFDGFMLAHDGHNCLDVDECL
ENNGGCQHTCVNVMGSYECCCKEGFFLSDNQHTCIHRSEGLSCMNKDHGCSHICKEAPRGSVACE
CRPGFELAKNQ RDCILTCNHGNGGCQHSCDDTADGPECSCHPQYKMHTDGRSCLEREDTVLEVTES
NTT SVVDGDKRVKRRLLMETCAVNNGGCDRTCKDTSTGVHCSCPVGFTLQLDGKTKDIDECQTRNG
GCDHFCKNI VGSFDCGCKKGFKLLTDEKSCQDVDECSLDRTCDHSCINHPGTFACACNRGYTLYGF
THCGDTNECSINNGGCQVCVNTVGSYEQCHPGYKLHWNKDCVEVKGLLPTSVSPRVSLHCGKSGG
DGCFLRCHSGIHLSSDVTTIRTSVTFKLNKCSLKNAELFPEGLRPALPEKHSSVKESEFRYVNL
TCSSGKQVPGAPGRPSTPKEMFITVEFELETNQKEVTASCDLSCIIVKREKRLRKAIRTLRKAVH
REQFHLQLSGMNLDVAKKPPRTSERQAESCQVGGQGHAEQCVSCRAGTYD GARERCILCPNGTF
QNEEQMTCPCPRPGNSGALKTPEAWNMSECGGLCQPGEYSADGFAPCQLCALGTFQPEAGRTS
CFPCGGGLATKHQGATSFQDCETRVQCSPGHFYNTTTHRCIRCPVGTYPQEFGKNNCVS
CPGNTTDFDSTNITQCKNRRCGGELGDFTYIESPNYPGNYPANTECTWTINPPFKRRILIVV
PEIFLPIEDDCGYLVMRKTSSNSVTYETCQTYERPIAFTSRSKKLWIQFKSNEGNSARGFQV
PYVYTYDEDYQELIEDIVRDGRLYASENHQEILKDKKLIKALFDVLAHPQNYFKYTAQESRE
MFRSFIRLLRSKVSRLRPYK
    
```

TRTRPLE - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

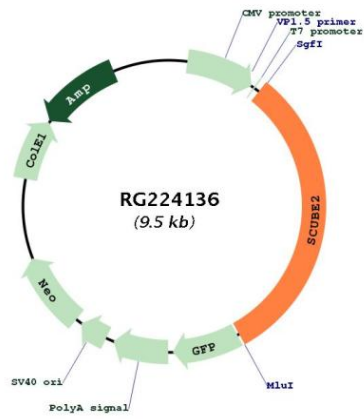


**ACCN:** NM\_020974

**ORF Size:** 2997 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<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_020974.1</a> , <a href="#">NP_066025.1</a>
<b>RefSeq Size:</b>	3737 bp
<b>RefSeq ORF:</b>	2916 bp
<b>Locus ID:</b>	57758
<b>UniProt ID:</b>	<a href="#">Q9NQ36</a>
<b>Cytogenetics:</b>	11p15.4
<b>Domains:</b>	CUB, EGF_CA, EGF, EGF
<b>Protein Families:</b>	Transmembrane
<b>Gene Summary:</b>	Lipid-binding protein required for SHH long-range signaling by binding to the dually lipid-modified SHH (ShhNp) and by promoting ShhNp mobilization, solubilization and release from the cell membrane (PubMed:22902404, PubMed:22677548). Acts by enhancing the proteolytic processing (shedding) of the lipid-modified N- and C- terminal of ShhNp at the cell surface (PubMed:24522195). Synergizes with DISP1 to increase SHH secretion (PubMed:22902404). Probable cell surface coreceptor for VEGFR2 involved in VEGFR2-mediated angiogenesis (PubMed:27834687).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG224136