

## Product datasheet for **RC230505**

### SCUBE2 (NM\_001170690) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SCUBE2 (NM_001170690) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SCUBE2
Synonyms:	CEGB1; CEGF1; CEGP1; scube/You
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC230505 representing NM\_001170690  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGGGTTCGCGGCGCAACCGTCCCGGGCGGCTGGCGGTGCTGCTGCTGCTGCTGCTGCCG  
 CACTGCTGCTGCTGGCGGGGCGTCCCGCCGGTTCGGGGCCGTGCCCGGGGCCAGGAGGATGTAGA  
 TGAGTGTGCCAAGGGCTAGATGACTGCCATGCCGACGCCCTGTGTGAGAACACACCCACCTCCTACAAG  
 TGCTCCTGCAAGCCTGGTACCAAGGGGAAGGCAGGCAGTGTGAGGACATCGATGAATGTGGAAATGAGC  
 TCAATGGAGGCTGTGCCATGACTGTTTGAATATTCCAGGCAATTATCGTTGCACTTGTTTTGATGGCTT  
 CATGTTGGCTCATGACGGTCATAATTGTCTTGATGTGGACGAGTGCCTGGAGAACAATGGCGCTGCCAG  
 CATACTGTGTCAACGTCATGGGAGCTATGAGTGTGCTGCAAGGAGGGTTTTCTGAGTGACAATC  
 AGCACACCTGCATTCACCGCTCGGAAGAGGGCCTGAGCTGCATGAATAAGGATCACGGCTGTAGTCAT  
 CTGCAAGGAGGCCCAAGGGCAGCGTCGCTGTGAGTGCAGGCTGGTTTTGAGCTGGCCAAGAACCAG  
 AGAGACTGCATCTTGACCTGTAACCATGGGAACGGTGGTGCCAGCACTCCTGTGACGATACAGCCGATG  
 GCCCAGAGTGCAGCTGCCATCCACAGTACAAGATGCACACAGATGGGAGGAGCTGCCTTGAGCGAGAGGA  
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 CTGCTCATGGAACGTGTGCTGTCAACAATGGAGGCTGTGACCGCACCTGTAAGGATACTTCGACAGGTG  
 TCCACTGCAGTTGTCTGTTGGATTCACTCTCCAGTTGGATGGGAAGACATGTAAGATATTGATGAGTG  
 CCAGACCCGCAATGGAGGTTGTGATCATTTCTGCAAAAACATCGTGGCAGTTTTGACTGCGGCTGCAAG  
 AAAGGATTTAAATTATTAACAGATGAGAAGTCTTGCCAAGATGTGGATGAGTGTCTTTGGATAGGACCT  
 GTGACCACAGCTGCATCAACACCCTGGCACATTTGCTTGCTTGAACCGAGGTACACCCTGTATGG  
 CTTACACCACTGTGGAGACACCAATGAGTGCAGCATCAACAACGGAGGCTGTGAGCAGGTCTGTGTAAC  
 ACAGTGGGCAGCTATGAATGCCAGTGCCACCCTGGGTACAAGCTCCACTGGAATAAAAAAGACTGTGTGG  
 CTTCTTGACCTGAGCTGCATCGTAAAGCGAACCAGAGAAGCGGCTCCGTAAGCCATCCGCACGCTCAG  
 AAAGGCCGTCCACAGGGAGCAGTTTCACTCCAGCTCAGGCATGAACCTCGACGTGGTAAAAAGCCT  
 CCCAGAACATCTGAACGCCAGGCAGAGTCTGTGGAGTGGCCAGGGTATGCAGAAAACCAATGTGTCA  
 GTTGCAGGGCTGGGACCTATTATGATGGAGCACGAGAACGCTGCATTTTATGTCCAATGGAACCTTCCA  
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 GAAGCTTGAATATGTCTGAATGTGGAGTCTGTGTCAACCTGGTGAATATTCTGCAGATGGCTTTGCAC  
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 GGACATTTCTACAACACCACCACTCACCGATGTATTTCGTTGCCAGTGGGAACATACCAGCCTGAATTTG  
 GAAAAAATAATTGTGTTTCTTGCCAGGAAATACTACGACTGACTTTGATGGCTCCACAACATAACCCA  
 GTGTAAAACTTCATCCAATTCTGTGACAACATATGAACTGCCAGACCTACGAACGCCCATCGCCTTC  
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 TCCCATACGTGACATATGATGAGGACTACCAGGAACTCATTGAAGACATAGTTTCGAGATGGCAGGCTCTA  
 TGATCTGAGAACCATCAGGAAACTTAAGGATAAGAACTTATCAAGGCTCTGTTTGATGTCCTGGCC  
 CATCCCCAGAACTATTTCAAGTACACAGCCCAGGAGTCCCGAGAGATGTTCCAAGATCGTTCATCCGAT  
 TGCTACGTTCCAAGTGTCCAGTTTTTGTGACCTTACAAA

**ACGCGT**ACGCGCGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC230505 representing NM\_001170690  
Red=Cloning site Green=Tags(s)

MGVAGRNRPGAAWAVLLLLLLLLPLLLLLAGAVPPGRGRAAGPQEDVDECAQGLDDCHADALCQNTPTS  
CCKPGYQGEGRQCEDIDECGNELNGGCVHDCLNIPGNYRCTCFDGFMLAHDGHNCLDVDECL  
ENGGCQHTCVNVMGSYECCCKEGFFLSDNQHTCIHRSEGLSCMNKDHGCSHICKEAPRG  
SVACECRPGFELAKNQ RDCILTCNHGNGGCQHSDDTADGPECSCHPQYKMHTDGRSCL  
EREDTVLEVTESENTTSVVDGDKRVKRR LLMETCAVNNGGCDRTCKDTSTGVHCSPV  
GFTLQLDGKTCKDIDECQTRNGGCDHFCKNIVGSFDCGCK KGFKLLTDEKSCQDVDE  
CSLDRTCDHSCINHPGTFACACNRGYTLYGFTHCGDTNECSINNGGCQQVCVN TVGS  
YEQCHPGYKLHWNKKDCVASCDLSCIIVKREKRLRKAIRTLRKAVHREQFHLQLSGM  
NLDAKKP PRTSERQAESCQVGGHAENQCVSCRAGTYDYGARERCILCPNGTFQNEEG  
QMTCEPCPRPGNSGALKTP EAWNMSECGGLCQPEYSADGFAPCQLCALGTFQPEAGRT  
SCFPCGGGLATKHQGATSFQDCETRVQCS GHFYNTTTHRCIRCPVGTYPQEFGKNN  
CVSCPGNTTDFDGTNITQCKTSSNSVTYETCQTYERPIAF TSKKLLWIQFKSNEG  
NSARGFQVPYVYDEYQELIEDIVRDGRLYASENHQEILKDKKLIKALFDVLA HPQ  
NYFKYTAQESREMFPRSFIRLLRSKVSRLRPYK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8103\\_e02.zip](https://cdn.origene.com/chromatograms/mk8103_e02.zip)

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001170690

**ORF Size:** 2421 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\\_001170690.2](#)

**RefSeq Size:** 4058 bp

**RefSeq ORF:** 2424 bp

**Locus ID:** 57758

**UniProt ID:** [Q9NQ36](#)

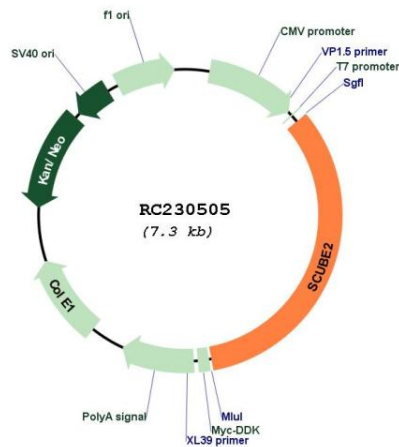
**Cytogenetics:** 11p15.4

**Protein Families:** Transmembrane

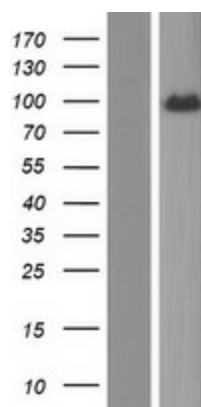
**MW:** 88.9 kDa

**Gene Summary:** 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 RC230505



Western blot validation of overexpression lysate (Cat# [LY433505]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC230505 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).