

Product datasheet for **RC224136**

SCUBE2 (NM_020974) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SCUBE2 (NM_020974) 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)
ORF Nucleotide Sequence:	>RC224136 representing NM_020974 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGGGGGTCGCGGGCCGCAACCGTCCCGGGGCGGCCTGGGCGGTGCTGCTGCTGCTGCTGCTGCCGC
CACTGCTGCTGCTGGCGGGGCGTCCCGCGGGTCGGGGCCGTGCCGCGGGGCCGAGGAGATGTAGA
TGAGTGTGCCAAGGGCTAGATGACTGCCATGCCGACGCCCTGTGTCAGAACACACCCACCTCCTACAAG
TGCTCCTGCAAGCCTGGCTACCAAGGGGAAGGCAGGCAGTGTGAGGACATCGATGAATGTGAAATGAGC
TCAATGGAGGCTGTGTCATGACTGTTTGAATATTCAGGCAATTATCGTTGCACTTGTTTTGATGGCTT
CATGTTGGCTCATGACGGTCATAATTGCTTGATGTGGACGAGTGCCTGGAGAACAATGGCGGCTGCCAG
CATACTGTGTCAACGTCATGGGAGCTATGAGTGTGCTGCAAGGAGGGTTTTCTCTGAGTGACAATC
AGCACACCTGCATTACCGCTCGGAAGAGGGCCTGAGTGCATGAATAAGGATCACGGCTGTAGTCACAT
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AGAGACTGCATCTTGACCTGTAACCATGGGAACGGTGGTGCCAGCACTCCTGTGACGATACAGCCGATG
GCCCAGAGTGACGCTGCCATCCACAGTACAAGATGCACACAGATGGGAGGAGTGCCTTGAGCGAGAGGA
CACTGTCTGGAGGTGACAGAGAGCAACACCACATCAGTGGTGGATGGGGATAAACGGGTGAAACGGCGG
CTGCTCATGGAACGTGTGCTGTCAACAATGGAGGCTGTGACCGCACCTGTAAGGATACTTCGACAGGTG
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GTAAACCTTTAAGCTAAATGAAGGCAAGTGTAGTTTGAAAAATGCTGAGCTGTTTCCCGAGGGTCTGCGAC
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 GCTAGAGGGTTCCAGGTCCCATACGTGACATATGATGAGGACTACCAGGAACCTATTGAAGACATAGTTC
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 AGATCGTTCATCCGATTGCTACGTTCCAAAGTGCCAGGTTTTTGAGACCTTACAAA

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAGGTTTAA

Protein Sequence:

>RC224136 representing NM_020974
 Red=Cloning site Green=Tags(s)

MGVAGNRNRPAAWAVLLLLLLLLPPLLLLLAGAVPPGRGRAAGPQEDVDECAQGLDDCHADALCQNTPTSYK
 CSCKPGYQGEGRQCEDIDECGNELNGGCVHDCLNIPGNYRCTCFDGFMLAHDGHNCLDVDECLENNGGCQ
 HTCYNVMGSYECCCKEGFFLSDNQHTCIHRSEGLSCMNKDHGCSHICKEAPRGSVACECRPGFELAKNQ
 RDCILTCNHGNGGCQHSCDDTADGPECSCHPQYKMHTDGRSCLEREDTVLEVTESNTTSVVDGDKRVKRR
 LLMETCAVNNGGCDRTCKDTSTGVHCSPVGFLLQLDGKTCKDIDECQTRNGGCDHFCKNIVGSFDCGCK
 KGFKLLTDEKSCQDVDECSLDRTCDHSCINHPGTAFACNRYGTYLGFTHCGDTNECSINNGGCQQVCVN
 TVGSYECQCHPGYKLHWNKKDCVEVKLLPTSVSPRVSLHCGKSGGGDGCFLRCHSGIHLSSDVTITRTS
 VTFKLNEGKCSLKNAELFPEGLRPALPEKHSSVKESFRYVNLTCSSGKQVPGAPGRPSTPKEMFITEFE
 LETNQKEVTASCDLSCIIVKREKRLRKAIRTLRKAVHREQFHLQLSGMNLDAKKPPRTSERQAESCQVG
 QGHAENQCVSCRAGTYDYGARERCILCPNGTFQNEEGQMTCEPCRPNGSGALKTPEAWNMSECGGLCQP
 GEYSADGFAPCQLCALGTFQPEAGRTSCFPCGGGLATKHQGATSFQDCETRVQCSPGHFYNTTTHRCIRC
 PVGTYQPEFGKNNCVSCPGNTTDFDGSNITQCKNRRCGGELGDFTYIESPNYPGNYPANTECTWTIN
 PPPKRRILIVPEIFLPIEDDCGYLVMRKTSSNSVTTYETCQTYERPIAFTSRKKLWIQFKNSEGN
 ARGFQVPYVYDEDYQELIEDIVRDGRLYASENHQEIILKDKKLIKALFDVLAHPQNYFKYTAQESREMFP
 RSFIRLLRSKVSRLRPYK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_020974

ORF Size: 2997 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.

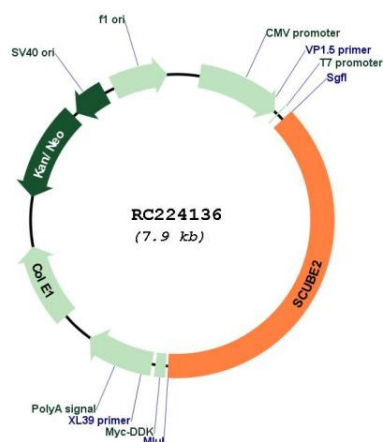
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_020974.1](#), [NP_066025.1](#)

RefSeq Size: 3737 bp
 RefSeq ORF: 2916 bp
 Locus ID: 57758
 UniProt ID: [Q9NQ36](#)
 Cytogenetics: 11p15.4
 Domains: CUB, EGF_CA, EGF, EGF
 Protein Families: Transmembrane
 MW: 106.6 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 RC224136