

## Product datasheet for RC220894

### SLIT2 (NM\_004787) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SLIT2 (NM_004787) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLIT2
Synonyms:	SLIL3; Slit-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC220894 representing NM_004787 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGCGCGCGTTGGCTGGCAGATGCTGTCCCTGTCGCTGGGGTTAGTGCTGGCGATCCTGAACAAGGTGGCACCAGGCGTGCCCGGCGCAGTGCTCTTGCTCGGGCAGCACAGTGGACTGTCACGGGCTGGCGCTGCCAGCGTGCCAGGAATATCCCCGCAACACCGAGAGACTGGATTTAAATGGAAATAACATCACAAGAATTACGAAGACAGATTTTGTGGTCTTAGACATCTAAGAGTCTTCAGCTTATGGAGAATAAGATTAGCACCA TTGAAAGAGGAGCATTCCAGGATCTTAAAGAACTAGAGAGACTGCGTTTTAACAGAAATCACCTTCAGCT GTTTCCTGAGTTGCTGTTTCTTGGGACTGCGAAGCTATACAGGCTTGATCTCAGTGAAAACCAAATTCAG GCAATCCAAGGAAAGCTTTCCGTGGGGCAGTTGACATAAAAAATTTGCAACTGGATTACAACGAGATCA GCTGTATTGAAGATGGGGCATTACGGGCTCTCCGGACCTGGAAGTGCTCACTCTCAACAATAACAACAT TACTAGACTTTTGTGGCAAGTTTCAACCATATGCCTAAACTTAGGACTTTTCGACTGCATTCAACAAC CTGTATTGTGACTGCCACCTGGCCTGGCTCTCCGACTGGCTTCGCCAAAGGCTCGGGTTGGTCTGTACA CTCAGTGTATGGGCCCTCCACCTGAGAGGCCATAATGTAGCCGAGGTTCAAAAACGAGAATTTGTCTG CAGTGGTCACCAGTCATTTATGGCTCCTTCTGTAGTGTTCGACTGCCCTGCCGCTGTACCTGTAGC AACAAATCGTAGACTGTCGTGGGAAAGTCTCACTGAGATCCCCACAAATCTCCAGAGACCATCACAG AAATACGTTTGGAAACAGAACACAATCAAAGTCATCCCTCCTGGAGCTTCTCACCATATAAAAAGCTTAG ACGAATTGACCTGAGCAATAATCAGATCTCTGAACCTGCACCAGATGCTTTCGAAGGACTACGCTCTCTG AATTCACTTGTCTCTATGAAAATAAAATCACAGAACTCCCCAAAAGTTTATTTGAAGGACTGTTTTCT TACAGCTCCTATTATTGAATGCCAACAAGATAAACTGCCTTCGGGTAGATGCTTTTCAGGATCTCCACA CTTGAACCTTCTCCCTATATGACAACAAGCTTCAGACCATCGCCAAGGGGACCTTTTCACCTCTTCGG GCCATTCAAATATGCATTTGGCCGAGAACCCTTTATTTGTGACTGCCATCTCAAGTGGCTAGCGGATT ATCTCCATACCAACCGATTGAGACCAGTGGTCCCGTTGCACCAGCCCCGCCGCTGGCAACAAAAG AATTGGACAGATCAAAGCAAGAAATTCGGTTGTCAGCTAAAGAACAGTATTTTCATTCCAGGTACAGAA



[View online >](#)

GATTATCGATCAAAATTAAGTGGAGACTGCTTTCGGATCTGGCTGCCCTGAAAAGTGTGCTGTGAAG  
GAACCACAGTAGATTGCTCTAATCAAAAGCTCAACAAAATCCCGGAGCACATTCCCAGTACACTGCAGA  
GTTGCGTCTCAATAATAATGAATTTACCGTGTGGAGCCACAGGAATCTTTAAGAACTTCCTCAATTA  
CGTAAAATAAACTTTAGCAACAATAAGATCACAGATATTGAGGAGGGAGCATTGGAAGGAGCATCTGGT  
TAAATGAAATACTTCTACGAGTAATCGTTTGGAAAATGTGCAGCATAAGATGTTCAAGGGATTGGAAG  
CCTCAAACTTTGATGTTGAGAAGCAATCGAATAACCTGTGTGGGAATGACAGTTTCATAGGACTCAGT  
CTGTGCGTTTGGCTTTTGTATGATAATCAAATTAACCTGTGTGGGAATGACAGTTGACACCAGGGCATTGATACTCTCC  
ATTCTTTATCTACTCTAAACCTCTTGGCCAATCCTTTTAACTGTAACCTGCTACCTGGCTTGGTGGGAGA  
GTGGCTGAGAAAAGAGAATTGTCACGGGAAATCCTAGATGTCAAAAACCATACTTCTGAAAAGAATA  
CCCATCCAGGATGTGGCCATTCCAGGACTTCACTTGTGATGACGGAAATGATGACAATAGTTGCTCCCCAC  
TTTCTCGTGTCTACTGAATGTACTTGGTGGATACAGTCGTCGGATGTAGCAACAAGGGTTGAAAGT  
CTTGCCGAAAGGTATTCCAAGAGATGTCACAGAGTTGTATCTGGATGGAACCAATTTACTGTTCC  
AAGGAATCTCCAACACAAACATTTAACACTTATAGACTAAGTAACAACAGAATAAGCAGCTTTCTA  
ATCAGAGCTTCAGCAACATGACCCAGCTCCTCACCTTAATTCTTAGTTACAACCGTCTGAGATGTATTCC  
TCCTCGCACCTTTGATGGATTAAGTCTCTTCGATTACTTCTCTACATGGAAAATGACATTTCTGTTGTG  
CCTGAAGGTGCTTCAATGATCTTCTGCAATATCACATCTAGCAATTGGAGCCAACCTCTTACTGTG  
ATTGTAACATGCAGTGGTTATCCGACTGGTGAAGTCGGAATATAAGGAGCCTGGAATTGCTCGTTGTG  
TGGTCTGGAGAAATGGCAGATAAACTTTTACTCACAACCTCCCTCAAAAAATTTACCTGTCAAGGTCT  
GTGGATGTCAATATTCTAGCTAAGTGAACCCCTGCCATCAAAATCCGTGTA AAAATGATGGCACATGTA  
ATAGTGATCCAGTTGACTTTTACCGATGCACCTGTCCATATGGTTTCAAGGGGCAGGACTGTGATGTCC  
AATTCATGCCTGCATCAGTAACCCATGTAACATGGAGGAACTTGCCACTTAAAGGAAGGAGAAGAAGAT  
GGATTCTGGTGTATTTGTGCTGATGGATTTGAAGGAGAAAATTTGTAAGTCAACGTTGATGATTGTAAG  
ATAATGACTGTGAAAATAATTCTACATGTGTCGATGGCATTAACTACACATGCCTTTGCCACCTGA  
GTATACAGGTGAGTTGTGTGAGGTGAAGCTGGACTTCTGTGCCAGGACCTGAACCCCTGCCAGCAGAT  
TCAAAGTGCATCCTAACTCCAAAGGGATTCAAATGTGACTGCACACCAGGTACGTAGGTGAACACTGCG  
ACATCGATTTTGGAGACTGCCAAGACAACAAGTGTAAAAACGGAGCCACTGCACAGATGCAGTGAACGG  
CTATACGTGCATATGCCCGAAGGTTACAGTGGCTTGTCTGTGAGTTTCTCCACCCATGGTCTCCCT  
CGTACCAGCCCCTGTGATAATTTGATTGTGAGAATGGAGCTCAGTGTATCGTCAGAATAAATGAGCCAA  
TATGTCAGTGTTCCTGGCTATCAGGGAGAAAAGTGTGAAAAATGGTTAGTGTGAATTTATAAAACA  
AGAGTCTTATCTCAGATTCCTCAGCCAAGGTTCCGGCTCAGACGAACATAACACTTCAGATTGCCACA  
GATGAAGACAGCGGAATCCTCCTGTATAAGGGTGACAAAGACCATATCGCGGTAGAACTCTATCGGGGGC  
GTGTTCTGTCAGCTATGACACCGGCTCTCATCCAGCTTCTGCCATTTACAGTGTGGAGACAATCAATGA  
TGGAAACTTCCACATTGTGGAACACTTGCCTGGATCAGAGTCTCTTTGTCCGTGGATGGTGGGAAC  
CCCAAAATCATCACTAATTGTCAAAGCAGTCCACTCTGAATTTTACTCTCCACTCTATGTAGGAGGCA  
TGCCAGGGAAGAGTAACGTGGCATCTCTGCGCCAGGCCCTGGGCAGAACGGAACAGCTTCCACGGCTG  
CATCCGGAACCTTACATCAACAGTGTGAGTGCAGGACTTCCAGAAGGTGCCGATGCAAACAGGCATTTG  
CCTGGCTGTGAGCCATGCCACAAGAAGGTGTGTGCCATGGCAGATGCCAGCCAGCAGCCAGGCAGGCT  
TCACCTGCGAGTGCCAGGAAGGATGGATGGGGCCCTCTGTGACCAACGGACCAATGACCCTTGCCTGG  
AAATAAATGCGTACATGGCACCTGCTTGCCCATCAATGCGTTTCTCTACAGCTGTAAGTGTGGAGGGC  
CATGGAGGTGTCCTCTGTGATGAAGAGGAGGATCTGTTTAAACCCATGCCAGGCGATCAAGTGCAAGCATG  
GGAAGTGCAGGCTTTCAGGTCTGGGGCAGCCCTACTGTGAATGCAGCAGTGGATACACGGGGGACAGCTG  
TGATCGAGAAATCTTTGTGAGGGGAAAGGATAAGAGATTATTACAAAAGCAGCAGGGCTATGCTGCT  
TGCCAAAACAACGAAGGTGTCCCGATTAGAGTGCAGAGGTGGGTGTGACAGGAGGCAGTGTGTGGAC  
CGCTGAGGAGCAAGCGCGGAAATACTCTTTGAAATGCACTGACGGCTCCTCTTTGTGGACGAGTTGA  
GAAAGTGGTGAAGTGGGCTGTACGAGGTGTGTGTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC220894 representing NM\_004787  
 Red=Cloning site Green=Tags(s)

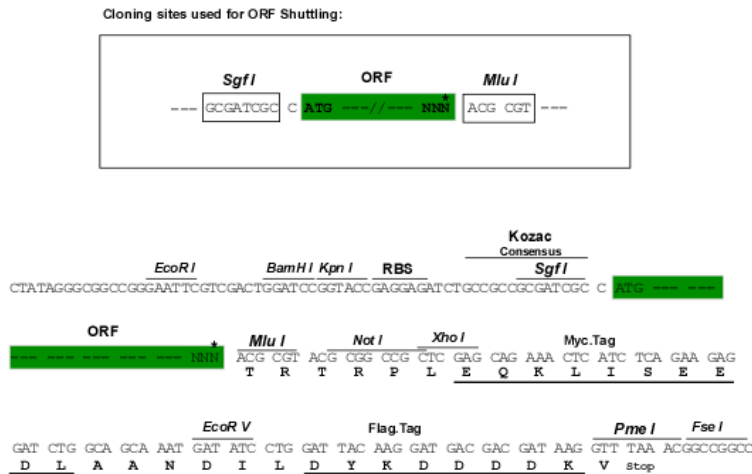
MRGVGWQMLSLSLGLVLAILNKVAPQACPAQCSCSGSTVDCHGLALRSVPRNIPRNTERLDLNGNITRI  
 TKTDFAGLRHLRVLQLMENKISTIERGAFQDLKELERLRNRNHLQLFPELLFLGTAKLYRLDLSENQIQ  
 AIPRKAFRGAVDIKNLQLDYNQISCIEDGAFRALRDLEVLTLNNNITRLSVASFNHMPKLRFRLHSNN  
 LYCDCHLAWLSDWLRQRPRVGLYTQCMGPSHLRGHNVAEVQKREFVCSGHQSFMAPSCSVLHCPAACTCS  
 NNIVDCRGKGLTEIPTNLPETITEIRLEQNTIKVIPPAGAFSPYKLRRIDLSNNQISELAPDAFQGLRSL  
 NSLVLYGNKITELEPKSLFEGLFSLQLLLNANKINCLRVDAFQDLHNLNLLSLYDNKLQTIAGTFSPLR  
 AIQTMHLAQNPFI CDCHLKWADYLHTNPIETSGARCTSPRRLANKRIGQIKSKKFRCSAKEQYFIPGTE  
 DYRSKLSGDCFADLACPEKCRCEGTTVDCSNQKLNKIPHIQYTAELRLNNEFTVLEATGIFKKLPQL  
 RKINFSNNKITDIEEGAFEGASGVNEILLTSNRLENVQHKMFKGLKESLTKLMLRSNRITCVGNSDFIGLS  
 SVRLLSLYDNQITTVAPGAFDTLHSLSTLNLNANPFCNCYLAWLGEWLKRRIVTGNPRCQKPYFLKEI  
 PIQDVAIQDFTCDGNDNSCSPLSRCPTCTCLDVTVRC SNKGLKVL PKGIPRDVTEL YLDGNQFTLVP  
 KELSNYKHLTLIDL SNNRISTLSNQFSNMTQLLTLILSYNRLRCIPRRTFDGLKSLRLLSLHGNDISVV  
 PEGAFNDLSALSHLAIGANPLYCDCNMQWLSDWVKSEYKEPGIARCAGPGEMADKLLLTTPSKKFTCQGP  
 VDVNILAKCNPCLSNPCKNDGTCNSDPVDFYRCTCPYGFKGQDCDVP IHACISNPCKHGGTCHLKEGEED  
 GFWICADGFEGENCEVNVDDCEDNDCENNSTCVDGINNYTCLCPPEYTGELCEVKLDFCAQDLNCPQHD  
 SKCILTPKGFKCDCTPGYVGEHCDIDFDDCQDNKCKNGAHTDAVNGYTCICPEGYSGLFCFSPMVL P  
 RTSPCDFNDCQNGAQCIVRINEPICQCLPGYQGEKCEKLVSVNFINKESYLQIPSAKVRPQTNITLQIAT  
 DEDSGILLYKGDKDHIAVELYRGRVRSYDTGSHPASAIYSVETINDGNFHIVELLALDQSLSLVDGGN  
 PKIITNL SKQSTLNFDSPLYVGGMPGKSNVASLRQAPGQNGT SFHGCIRNLYINSELQDFQKVPMTGIL  
 PGCEPCHKKVCAGHTCQPSSQAGFTCECQEGWGMGPLCDQRTNDPCLGNKCVHGTCLP INAFYSYCKLEG  
 HGGVLCDEEEDL FNPCQA IKCKHGKCRLSGLGQPYCECSSGYTGDCSDREI SCRGERIRDYQKQGYAA  
 CQTTKKVSRLECRGGCAGGQCCGPLRSKRRKYSFECTDGSSFVDEVEKVVKCGCTRCVS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

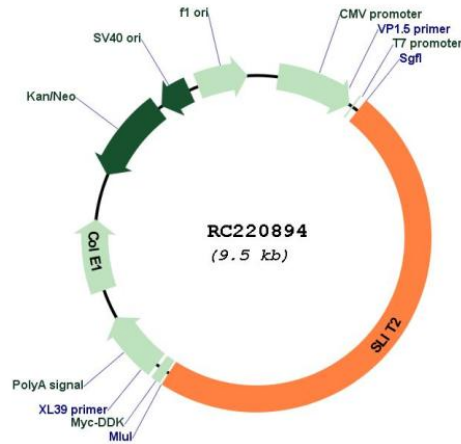
**Chromatograms:** [https://cdn.origene.com/chromatograms/mg2546\\_g09.zip](https://cdn.origene.com/chromatograms/mg2546_g09.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**Plasmid Map:**


**ACCN:** NM\_004787

**ORF Size:** 4587 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in *E. coli* are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_004787.4](#)

**RefSeq Size:** 4950 bp

**RefSeq ORF:** 4590 bp

**Locus ID:** 9353

**UniProt ID:** [O94813](#)

**Cytogenetics:** 4p15.31

**Domains:** LRRNT, LRRCT, LRR, LamG, EGF\_CA, LRR\_TYP, CT, EGF, EGF, LRR\_PS

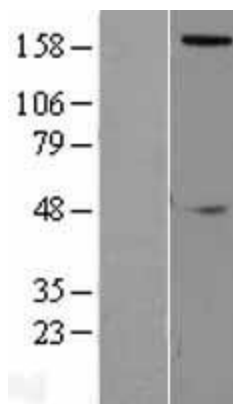
**Protein Families:** Druggable Genome, Secreted Protein

**Protein Pathways:** Axon guidance

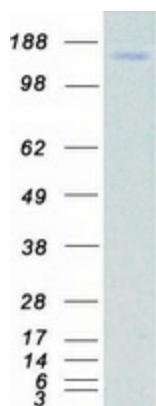
**MW:** 169.7 kDa

**Gene Summary:** This gene encodes a member of the slit family of secreted glycoproteins, which are ligands for the Robo family of immunoglobulin receptors. Slit proteins play highly conserved roles in axon guidance and neuronal migration and may also have functions during other cell migration processes including leukocyte migration. Members of the slit family are characterized by an N-terminal signal peptide, four leucine-rich repeats, nine epidermal growth factor repeats, and a C-terminal cysteine knot. Proteolytic processing of this protein gives rise to an N-terminal fragment that contains the four leucine-rich repeats and five epidermal growth factor repeats and a C-terminal fragment that contains four epidermal growth factor repeats and the cysteine knot. Both full length and cleaved proteins are secreted extracellularly and can function in axon repulsion as well as other specific processes. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015]

## Product images:



Western blot validation of overexpression lysate (Cat# [LY401507]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220894 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SLIT2 protein (Cat# [TP320894]). The protein was produced from HEK293T cells transfected with SLIT2 cDNA clone (Cat# RC220894) using MegaTran 2.0 (Cat# [TT210002]).