

## Product datasheet for **RC240170**

### SLIT2 (NM\_001289136) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SLIT2 (NM_001289136) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLIT2
Synonyms:	SLIL3; Slit-2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC240170 representing NM_001289136 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGCGCGCGTGGCTGGCAGATGCTGTCCCTGTCGCTGGGGTTAGTGCTGGCGATCCTGAACAAGGTGG  
CACCGCAGGCGTCCCGGCGCAGTGCTCTTGCTCGGGCAGCACAGTGGACTGTCACGGGCTGGCGTGGC  
CAGCGTGCCAGGAATATCCCCGCAACACCGAGAGACTGGATTTAAATGGAAATAACATACAAGAATT  
ACGAAGACAGATTTTGTGGTCTTAGACATCTAAGAGTTCTTCAGCTTATGGAGAATAAGATTAGCACCA  
TTGAAAGAGGAGCATTCCAGGATCTTAAAGAACTAGAGAGACTGCGTTTAAACAGAAATCACCTTAGCT  
GTTTCTGAGTTGCTGTTTCTTGGGACTGCGAAGCTATACAGGCTTGATCTCAGTGAAAACCAAATTCAG  
GCAATCCAAGGAAAGCTTCCGTGGGGCAGTTGACATAAAAAATTTGCAACTGGATTACAACAGATCA  
GCTGTATTGAAGATGGGGCATTACAGGCTCTCCGGGACCTGGAAGTGCTCACTCTCAACAATAACAACAT  
TACTAGACTTTCTGTGGCAAGTTCAACCATATGCCTAACTTAGGACTTTTCGACTGCATTCAACAAC  
CTGTATTGTGACTGCCACCTGGCCTGGCTCTCCGACTGGCTTCGCCAAAGGCTCGGGTTGGTCTGTACA  
CTCAGTGTATGGCCCCCTCCACCTGAGAGGCCATAATGTAGCCGAGGTTCAAAAACGAGAATTTGTCTG  
CAGTGGTACCAGTCATTTATGGCTCCTTCTGTAGTGTGTTTGCCTGCCCTGCCGCTGTACCTGTAGC  
AACAATATCGTAGACTGTCGTGGAAAGTCTCACTGAGATCCCCACAAATCTTCCAGAGACCATCACAG  
AAATACGTTTGGAAACAGAACACAATCAAAGTCATCCCTCCTGGAGCTTCTCACCATATAAAAAGCTTAG  
ACGAATTGACCTGAGCAATAATCAGATCTCTGAACCTGCACCAGATGCTTCCAAGGACTACGCTCTCTG  
AATTCACTTGCTCTATGAAAATAAAATCACAGAACTCCCCAAAAGTTTATTTGAAGGACTGTTTTCT  
TACAGCTCCTATTATTGAATGCCAACAAGATAAACTGCCTTCGGGTAGATGCTTTTCAGGATCTCCACAA  
CTTGAACCTTCTCCTATATGACAACAAGCTTCAGACCATCGCAAGGGGACCTTTTCACCTCTTCGG  
GCCATTCAAATATGCATTTGGCCGAGAACCCTTTATTTGTGACTGCCATCTCAAGTGGCTAGCGGATT  
ATCTCCATACCAACCGATTGAGACCAGTGGTGCCTGTTGCACCAGCCCCGCGGCTGGCAACAAAAG  
AATTGGACAGATCAAAGCAAGAAATCCGTTGTTTCAGGTACAGAAGATTATCGATCAAAATTAAGTGG  
GACTGCTTTGCGGATCTGGCTTGCCTGAAAAGTGTGCTGTGAAGGAACCACAGTAGATTGCTCTAATC



[View online >](#)

AAAAGCTCAACAAAATCCCGGAGCACATTCCCCAGTACACTGCAGAGTTGCGTCTCAATAATAATGAATT  
TACCGTGTGGAAAGCCACAGGAATCTTTAAGAACTTCCTCAATTACGTAATAAACTTTAGCAACAAT  
AAGATCACAGATATTGAGGAGGGAGCATTTGAAGGAGCATCTGGTGTAAATGAAATACTTCTTACGAGTA  
ATCGTTTGGAAAATGTGCAGCATAAGATGTTCAAGGGATTGAAAAGCCTCAAACCTTTGATGTTGAGAAG  
CAATCGAATAACCTGTGTGGGAATGACAGTTTCATAGGACTCAGTTCGTGCGTTTGTCTTCTTTGTAT  
GATAATCAAATTAACAGTTGCACCAGGGCATTGATACTCTCCATTTTATCTACTCTAAACCTCT  
TGGCCAATCCTTTAACTGTAAGTCTACCTGGCTTGGTTGGGAGAGTGGCTGAGAAAAGAGAGAATTGT  
CACGGGAAATCCTAGATGTCAAAAACCATCTTCTGAAAGAAAATACCCATCCAGGATGTGGCCATTCAG  
GACTTCACTTGTGATGACGGAAAATGATGACAATAGTTGCTCCCCACTTTCTCGTGTCTACTGAATGTA  
CTTGCTTGGATACAGTCGTCGATGTAGCAACAAGGGTTTGAAGGTCTTGCCGAAAGGTATTCCAAGAGA  
TGTACAGAGTTGATCTGGATGAAAACCAATTTACTGTTTCCAAGGAACTCTCCAACATAAAACAT  
TTAACACTTATAGACTTAAGTAACAACAGAATAAGCACGCTTCTAATCAGAGCTTCAGCAACATGACCC  
AGCTCCTCACCTAATTCTTAGTTACAACCGTCTGAGATGATTCTCCTCGCACCTTTGATGGATTAA  
GTCTCTCGATTACTTTCTACATGAAAATGACATTTCTGTTGTCCTGAAGGTGCTTTCAATGATCTT  
TCTGCATTATCACATCTAGCAATTGGAGCCAACCTCTTTACTGTGATTGTAACATGCAGTGGTTATCCG  
ACTGGGTGAAGTCGAAATAAAGGAGCCTGGAATTGCTCGTTGTGCTGGTCTGGAGAAAATGGCAGATAA  
ACTTTTACTCACAACTCCCTCCAAAAAATTTACCTGTCAAGGTCCTGTGGATGTCAATATTCTAGCTAAG  
TGTAACCCCTGCCTATCAAAATCCGTGTA AAAATGATGGCAGATGTAATAGTGATCCAGTTGACTTTTACC  
GATGCACCTGTCCATATGGTTTCAAGGGCAGGACTGTGATGTCCCAATTCATGCCTGCATCAGTAACCC  
ATGTAACATGGAGGAACTTGCCACTTAAAGGAAGGAGAAGAAGATGGATTCTGGTGTATTTGTGCTGAT  
GGATTTGAAGGAGAAAATGTGAAGTCAACGTTGATGATTGTGAAGATAATGACTGTGAAAATAATTCTA  
CATGTGTCGATGGCATTAACTACACATGCCCTTGGCCACCTGAGTATACAGGTGAGTTGTGTGAGGA  
GAAGTTGAACTTCTGTGCCAGGACTGAACCCCTGCCAGCAGATTCAAAGTGCATCTAACTCCAAAG  
GGATTCAAATGTGACTGCACACCGGGTACGTAGGTGAACACTGCGACATCGATTTTGACGACTGCCAAG  
ACAACAAGTGTAAAAACGGAGCCACTGCACAGATGCAAGTGAACGGCTATACGTGCATATGCCCCGAAAG  
TTACAGTGGCTTGTCTGTGAGTTTCTCCACCCATGGTCTCCCTCGTACCAGCCCTGTGATAATTTT  
GATTGTGAGAATGGAGCTCAGTGTATCGTCAGAATAAATGAGCCAATATGTCAGTGTGGCTGGCTATC  
AGGGAGAAAAGTGTGAAAATGGTTAGTGTGAATTTTATAAACAAAGAGTCTTATCTTCAGATTCTTC  
AGCCAAGTTTCGGCTCAGACGAACATAACACTTCAGATTGCCACAGATGAAGACAGCGGAATCCTCCTG  
TATAAGGGTGACAAGACCATATCGCGTGAAGTCTATCGGGGGCGTTCGTGCCAGCTATGACACCG  
GCTCTCATCCAGCTTCTGCCATTTACAGTGTGGAGACAATCAATGATGAAAACCTCCACATTGTGGAAC  
ACTTGCCTTGGATCAGAGTCTCTTTGTCCGTGGATGGTGGAAACCCCAAAATCATCACTAACTTGTCA  
AAGCAGTCCACTCTGAATTTGACTCTCCACTCTATGTAGGAGGCATGCCAGGGAAGAGTAACGTGGCAT  
CTCTGCGCCAGGCCCTGGGAGAACCGAACAGCTTCCACGGCTGCATCCGGAACCTTTACATCAACAG  
TGAGCTGCAGGACTTCCAGAAGGTGCCGATGCAAAACAGGCATTTTGCCTGGCTGTGAGCCATGCCACAAG  
AAGGTGTGTGCCATGGCAGATGCCAGCCAGCAGCCAGGAGGCTTACCTGCGAGTGCAGGAAGGAT  
GGATGGGGCCCTCTGTGACCAACGGACCAATGACCTTGCCTTGGAAAATAAATGCGTACATGGCACCTG  
CTTGCCCATCAATGCGTTCTCTACAGCTGTAAGTGTGGAGGGCCATGGAGGTGCTCTGTGATGAA  
GAGGAGGATCTGTTTAAACCATGCCAGGGATCAAGTGAAGCATGGGAAGTGCAGGCTTTCAGGTCTGG  
GGCAGCCCTACTGTGAATGCAGCAGTGGATACAGGGGGACAGCTGTGATCGAGAAAATCTTTGTGAGG  
GGAAAGGATAAGAGATTATTACCAAAAAGCAGCAGGGCTATGCTGCTTGCACAAACAACGAAGGTGCC  
CGATTAGAGTGCAGAGGTGGGTGTGCAGGAGGGCAGTGTGTGGACCGCTGAGGAGCAAGCGGGGAAAT  
ACTCTTTCGAATGCACTGACGGCTCTCTTTGTGGACGAGGTTGAGAAAAGTGGTGAAGTGGGCTGTAC  
GAGGTGTGTGCC

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC240170 representing NM\_001289136  
 Red=Cloning site Green=Tags(s)

MRGVGWQMLSLSLGLVLAILNKVAPQACPAQCSCSGSTVDCHGLALRSVPRNIPRNTERLDLNGNITRI  
 TKTDFAGLRHLRVLQLMENKISTIERGAFQDLKELERLRNRNHLQLFPELLFLGTAKLYRLDLSENQIQ  
 AIPRKAFRGAVDIKNLQLDYNQISCIEDGAFRALRDLEVLTLNANNITRLSVASFNHMPKLRFRRLHSNN  
 LYCDCHLAWLSDWLRQRPRVGLYTQCMGPSHLRGHNVAEVQKREFVCSGHQSFMAPSCSVLHCPAECTCS  
 NNIVDCRGKGLTEIPTNLPETITEIRLEQNTIKVIPPAGAFSPYKLRRIDLSNNQISELAPDAFQGLRSL  
 NSLVLYGNKITEPKSLFEGLFSLQLLLNANKINCLRVDAFQDLHNLNLLSLYDNKLQTIKGTFSPLR  
 AIQTMHLAQNPFI CDCHLKWADYLHTNPIETSGARCTSPRRLANKRIGQIKSKKFRCSGTEDYRSKLSG  
 DCFADLACPEKCRCEGTTVDCSNQKLNKIPHIQYTAELRLNNEFTVLEATGIFKKLPQLRKINFNN  
 KITDIEEGAFEGASGVNEILLTSNRLENVQHKMFKGLSKLTLMLRSNRITCVGNDSFIGLSSVRLLSLY  
 DNQITTVAPGAFDTLHSLSTLNLNANPFCNCYLAWLGEWLRKKRIVTGNPRCQKPYFLKEIPIQDVAIQ  
 DFTCDDGNDNSCSPLSRCPTCTCLDVTVRCNSKGLKVLPGKIPRDVTELYLDGNQFTLVPKELSNYKH  
 LTLIDLNNRISTLSNQFSNMTQLLTLILSYNRLRCIPRPTFDGLKSLRLLSLHGNDISVVPEGAFNDL  
 SALSHLAIGANPLYCDCNMQWLSWVVKSEYKEPGIARCAGPGEMADKLLLTTPSKKFTCQGPVDVNLAK  
 CNPCLSNPCKNDGTCNSDPVDFYRCTCPYFGKQDCDVP IHACISNPCKHGGTCHLKEGEEDGFWICAD  
 GFEGENCEVNVDDCEDNDCENNSTCVDGINNYTCLCPPEYTGELCEEKLDCAQDLNPCQHDSKICILTPK  
 GFKCDCTPGYVGEHCDIDFDDCQDNKCKNGAHCDAVNGYTCICPEGYSGLFCEFSPPMVLPRTPSPDNF  
 DCQNGAQCIVRINEPICQCLPGYQGEKCEKLVSVNFINKESYLQIPSAKVRPQTNI TLQIATDEDSGILL  
 YKGDKDHIAVELYRGRVRASYDTGSHPASAIYSVETINDGNFHI VELLALDQSLSLVDGGNPKIITNLS  
 KQSTLNFDSPL YVGGMPGKSNVASLRQAPGQNGTSFHGCIRNLYINSELQDFQKVPMTGILPGCEPCHK  
 KVCAHGTCPQSSQAGFTCECQEGWGMGPLCDQRTNDPCLGNKCVHGTCLP INAFYSYCKCLEGGHGGVLCDE  
 EEDLFNPCQAIKCKHGKCRLSGLGQPYCECSSGYTGDSDCREI SCRGERIRDYQKQQGYAACQTTKKVVS  
 RLECRGGCAGGQCCGPLRSKRRKYSFECTDGSSFFVDEVEKVVKCGCTRCVS

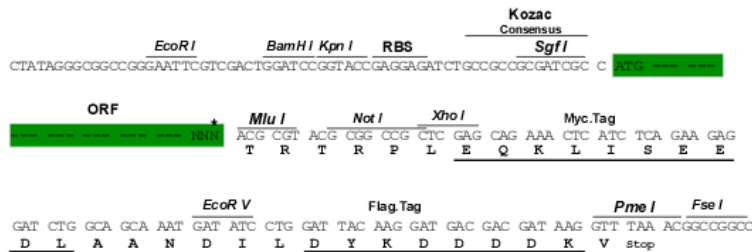
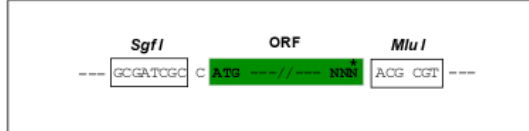
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

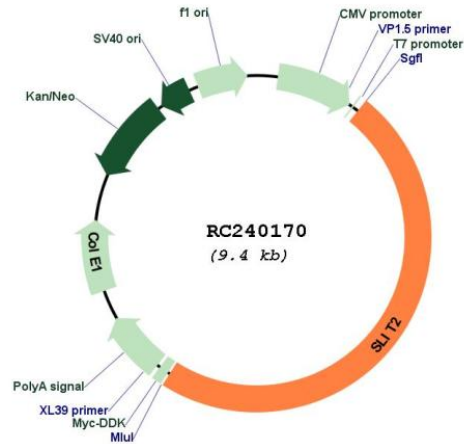
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



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

**Plasmid Map:**


**ACCN:** NM\_001289136

**ORF Size:** 4563 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\\_001289136.3](#)

**RefSeq Size:** 6374 bp

**RefSeq ORF:** 4566 bp

**Locus ID:** 9353

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

**Cytogenetics:** 4p15.31

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

**Protein Pathways:** Axon guidance

**MW:** 169.3 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]