

## Product datasheet for **RG218562**

### SLIT1 (NM\_003061) Human Tagged ORF Clone

#### Product data:

|                                  |                                                                    |
|----------------------------------|--------------------------------------------------------------------|
| <b>Product Type:</b>             | Expression Plasmids                                                |
| <b>Tag:</b>                      | TurboGFP                                                           |
| <b>Symbol:</b>                   | SLIT1                                                              |
| <b>Synonyms:</b>                 | MEGF4; SLIL1; SLIT-1; SLIT3                                        |
| <b>Mammalian Cell Selection:</b> | Neomycin                                                           |
| <b>Vector:</b>                   | pCMV6-AC-GFP (PS100010)                                            |
| <b>E. coli Selection:</b>        | Ampicillin (100 ug/mL)                                             |
| <b>Protein Sequence:</b>         | >RG218562 representing NM_003061<br>Red=Cloning site Green=Tags(s) |

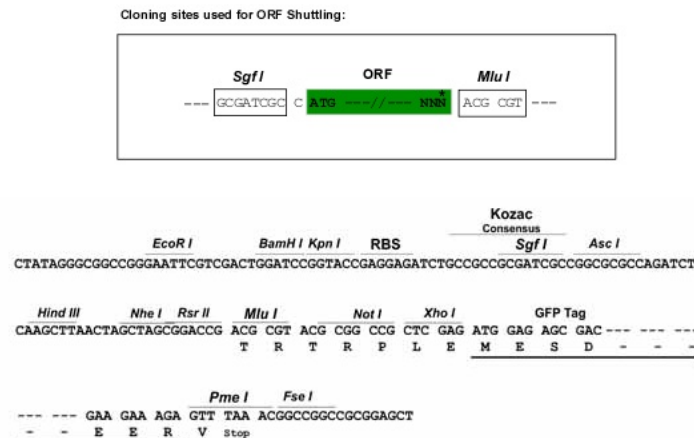
MALTPGWGSSAGPVRPELWLLLWAAWRLGASACPALCTCTGTTVDCHGTGLQAIPKNIPRINTERLELNG  
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SENAIQAIIPRKAFRGATDLKNLQDKNQISCIEGAFRALRGLEVLTLNNNNITIPVSSFNHPKLRTF  
RLHSNHLFCDCHLAWLSQWLRQRPITGLFTQCSGPASLRGLNVAEVQKSEFSCSGQGEAGRVPTCTLSG  
SCPAMCTCSNGIVDCRGKGLTAIPANLPETMTEIRLELNGIKSIPPGAFSPYRKLRRIDLNNQIAEIAIP  
DAFQGLRSLNSLVLYGNKITDLPGRVFGGLYTLQLLLNANKINCIRPDAFQDLQNLSSLSDYDNKIQSL  
AKGTFTSLRAIQTLHLAQNPFICDCNLKWLADFLRTNPIETSGARCASPRRLANKRIGQIKSKFRCSAK  
EQYFIPGTEDYQLNSECNSDVVCPHKCRCEANVVECSSLKLTKIPERIPQSTAEELRLNNEISILEATGM  
FKKLTHLKKINLSNNKVSEIEDGAFEGAASVSELHLTANQLESIRSGMFRGLDGLRTLMLRNNRISCIHN  
DSFTGLRNVRLLSLYDNQITTVSPGAFDTLQSLSTLNLNANPFCNCQLAWLGGWLRKRKIIVTGNPRCQN  
PDFLRQIPLQDVAFPDFRCEEQEEGGCLPRPQCPQECACLDTVVRCNSKHLRALPKGIPKNVTELYLDG  
NQFTLVPGQLSTFKYLQVLVDLSNNKISSLSNSSFNMSQLTTLILSYNALQCIPPLAFQGLRSLRLSLH  
GNDISTLQEGIFADVTLSHLAIGANPLYCDCHLRWLSWVKTGYKEPGIARCAGPQDMEGKLLLTTPAK  
KFECQGPPTLAVQAKCDLCLSSPCQNQGTCHNDPLEVYRCACPSGYKGRDCEVSLDSCSSGPCENGGTCH  
AQEGEDAPFTCSPTGFEGPTCGVNTDDCVDHACANGGVCVDGVGNVTCQCPLQYEGKACEQLVDLCSPD  
LNPCQHEAQCVGTPDGPCECMPGYAGDNCSNENQDDCRDHRCQNGAQCMDDEVNSYSCLCAEGYSGQLCEI  
PPHLPAKSPCEGTECQNGANCVDQGNRPVCQCLPGFGGPECEKLLSVNFVDRDYLQFTDLQNWPRANI  
TLQVSTAEDNGILLYNGDNDHIAVELYQGHVRSYDPGSYPSSAIYSAETINDGQFHTVELVAFDQMVNL  
SIDGGSPMTMDNFGKHYTLNSEAPLYVGGMPVDVNSAAFRLWQILNGTGFHGCIRNLYINNELQDFTKTQ  
MKPGVVPGEPCPKLYCLHIGICQPNATPGPMCHCEAGWVGLHCDQPADGPCHGHKCVHGQCVPDLALSY  
CQCQDGYSGALCNQAGALAEPCRGQLCLHGHCAQSGTKGAHVCVDPGFSGELCEQESECRGDPVRDFHQV  
QRGYAICQTTTRPLSWVECRGSCPGQGCCQLRLKRRKFTFECSDGTSFAEEVEKPTKCGCALCA

TRTRPLE - GFP Tag - V



**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_003061

**ORF Size:** 4602 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\\_003061.1](#), [NP\\_003052.1](#)

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|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>RefSeq Size:</b>      | 5094 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>RefSeq ORF:</b>       | 4605 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Locus ID:</b>         | 6585                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>UniProt ID:</b>       | <a href="#">O75093</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Cytogenetics:</b>     | 10q24.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Protein Families:</b> | Druggable Genome                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Protein Pathways:</b> | Axon guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Gene Summary:</b>     | Thought to act as molecular guidance cue in cellular migration, and function appears to be mediated by interaction with roundabout homolog receptors. During neural development involved in axonal navigation at the ventral midline of the neural tube and projection of axons to different regions (By similarity). SLIT1 and SLIT2 together seem to be essential for midline guidance in the forebrain by acting as repulsive signal preventing inappropriate midline crossing by axons projecting from the olfactory bulb.[UniProtKB/Swiss-Prot Function] |