

Product datasheet for **RG220241**

Neurotrypsin (PRSS12) (NM_003619) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Neurotrypsin (PRSS12) (NM_003619) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PRSS12
Synonyms:	BSSP-3; BSSP3; MRT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG220241 representing NM_003619
 Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence: >RG220241 representing NM_003619
 Red=Cloning site Green=Tags(s)

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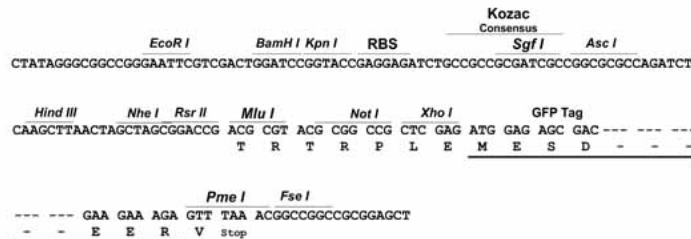
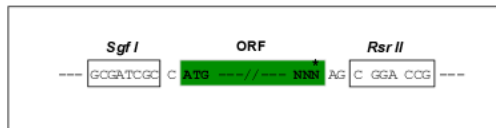
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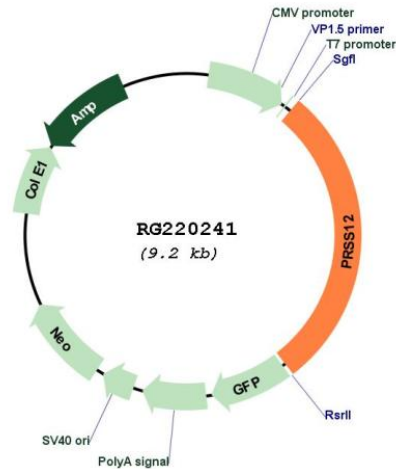
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Restriction Sites: SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:


ACCN: NM_003619

ORF Size: 2625 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 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_003619.4](#)

RefSeq Size: 4573 bp

RefSeq ORF: 2628 bp

Locus ID: 8492

UniProt ID: [P56730](#)

Cytogenetics: 4q26

Domains: KR, SR, Tryp_SPc

Protein Families: Druggable Genome, Protease, Secreted Protein

Gene Summary: This gene encodes a member of the trypsin family of serine proteases and contains a signal peptide, a proline-rich region, a Kringle domain, four scavenger receptor cysteine-rich domains, and a trypsin-like serine protease domain. The protein, sometimes referred to as neurotrypsin or motopsin, is secreted from neuronal cells and localizes to the synaptic cleft. Studies in mice show that this protein cleaves a protein, agrin, that is important for the formation and maintenance of excitatory synapses. Defects in this gene cause a form of autosomal recessive cognitive impairment (MRT1). [provided by RefSeq, Jul 2017]