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Product datasheet for RR207265

Snx3 (NM_001044283) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Snx3 (NM_001044283) Rat Tagged ORF Clone

Tag: Myc-DDK

Symbol: Snx3

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide Sequence:

>RR207265 representing NM_001044283
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGAGACCGTAGCGGACACCCGGCGGCTCATCACCAAGCCGCAGAACCTGAATGACGCCTACGGGC
CGCCCAGCAACTTCCTCGAGATCGACGTGAGCAATCCGCAGACTGTGGGGGTCGGCCGGGGCCGCTTCAC
CACCTACGAGATCAGGGTCAAGACCAATCTTCCTATCTTCAAGCTGAAGGAATCTACTGTTAGAAGAAGA
TACAGTGACTTTGAGTGGCTTCGAAGTGAACTAGAGAGAGAGAGCAAGGTTGTCGTTCCCCCACTCCCGG
GGAAAGCATTTTTGCGGCAGCTTCCTTTTAGAGGAGACGATGGAATATTTGACGATAATTTCATCGAGGA
AAGGAAGCAAGGGCTGGAACAGTTCATAAACAAGGTCGCTGGTCATCCTCTGGCCCAGAATGAACGTTGT
CTTCACATGTTTTTACAGGATGAAATCATAGATAAAAGCTATACTCCATCTAAAATAAGACATGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR207265 representing NM_001044283
Red=Cloning site Green=Tags(s)

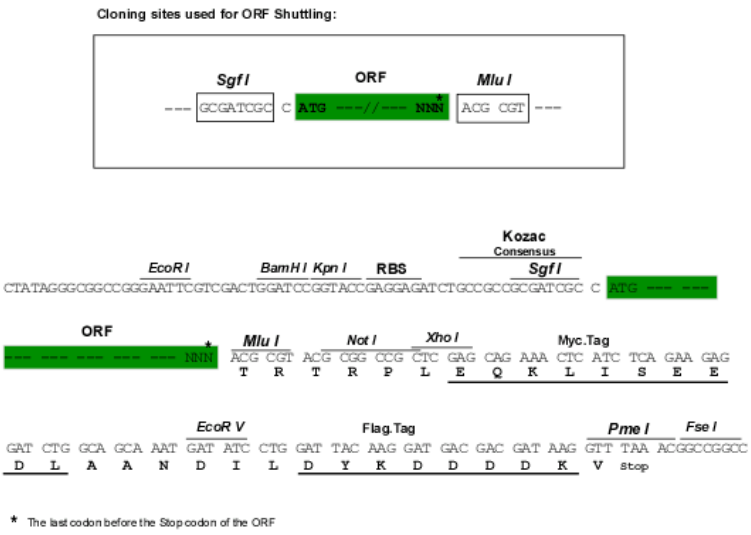
MAETVADTRRLITKPQNLNDAYGPPSNFLEIDVSNPQTVGVGRGRFTTYEIRVKTNLPIFKLKESTVRRR
YSDFEWLRSELERESKVVVPPLPGKAFLRQLPFRGDDGIFDDNFIEERKQGLEQFINKVAGHPLAQNERC
LHMFLQDEIIDKSYTPSKIRHA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

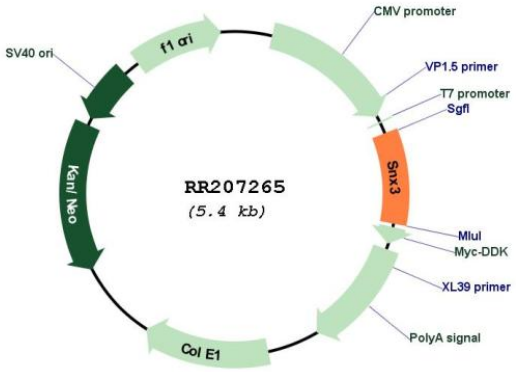
Restriction Sites: SgfI-MluI

View online »

Cloning Scheme:



Plasmid Map:



ACCN: NM_001044283

ORF Size: 486 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_001044283.1, NP_001037748.1
RefSeq Size:	1490 bp
RefSeq ORF:	489 bp
Locus ID:	684097
UniProt ID:	Q5U211
Cytogenetics:	20q13
MW:	18.8 kDa
Gene Summary:	Phosphoinositide-binding protein required for multivesicular body formation. Specifically binds phosphatidylinositol 3-phosphate (PtdIns(P3)). Also can bind phosphatidylinositol 4-phosphate (PtdIns(P4)), phosphatidylinositol 5-phosphate (PtdIns(P5)) and phosphatidylinositol 3,5-biphosphate (PtdIns(3,5)P2). Plays a role in protein transport between cellular compartments. Together with RAB7A facilitates endosome membrane association of the retromer cargo-selective subcomplex (CSC). May act in part as component of the SNX3-retromer complex which mediates the retrograde endosome-to-TGN transport of WLS distinct from the SNX-BAR retromer pathway. Promotes stability and cell surface expression of epithelial sodium channel (ENAC) subunits SCNN1A and SCNN1G. Not involved in EGFR degradation. Involved in the regulation of phagocytosis in dendritic cells possibly by regulating EEA1 recruitment to the nascent phagosomes. Involved in iron homeostasis through regulation of endocytic recycling of the transferrin receptor Tfrc presuambly by delivering the transferrin:transferrin receptor complex to recycling endosomes; the function may involve the CSC retromer subcomplex. Involved in regulation of neurite outgrowth in primary neurons.[UniProtKB/Swiss-Prot Function]