

Product datasheet for **MR207131**

Sctr (BC089355) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sctr (BC089355) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sctr
Synonyms:	6530402O03Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MR207131 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCTCAGCACCATGAGCCCCGGCTGTCACTGCTTCTGCTGTGGCTGCTGCTGCTCATCAATGCAGCGC
 ACCCTGTTGGAGCTCTGCCAGATTGTGTGATGTGCGGGCTGTGCTGCTCGAGGAACGGGCCGAGTGCCT
 GCGGGAACCTCCGAAGAGAAGAAGGCGCTGGGCCGAAGACAGCATCAGGCTGTGAGAGTTTTGGGAC
 AACATGAGCTGTGGCCCTCTCGGCACTGGCAGACAGTGGAAAGTCCCATGTCCGAAGTTCCTGAGGA
 TGTTCTCTGGCAGAAATGGGTCTCTGTTCCGAACTGCACAAAGGATGGTGGTGCAGAAACCTTCCCCAG
 GCCTGACCTGGCTGTGGGTCAACATGAATGGCTCCTTAAATGAGAGACGGCATGCATACCTGCTGAAG
 CTCAAGGTCATGTACTGTAGGCTACAGTTCCTCTGGCCATGCTCCTGGTCGCCCTCAGCATCTGT
 GCTCTTCCGGAGGCTGCACTGCACTCGCAACTACATCCACATGCACCTGTTTGTGCTTCATCTTCCG
 CGCCCTGTCCAATTCATCAAGGACGCGTACTTCCCGCAGATGACGTCACCTACTGTGATGCCAC
 AGGGCAGGCTGCAAGCTGGTCATGATCTTCTCCAGTACTGCATCATGGCCAACACGCTGGTGGTGG
 TGGAGGCTCTATCTTACACGCTCCTGGCCATCTCCTTCTTCTCAGAAAGGAAGTGCCTGCAGGCATT
 TGTGCTCTTCCGATGGGTTCTCCAGCCATTTTGTGCTTTGTGGGCTGTACCAGACACTTTCTGGAG
 GACTTTGGATGCTGGGACATCAACTCCAACGCTCCATCTGGTGGTCAATTCGAGGGCTGTGATTCTGT
 CCATCGTGATCAATTTTCTTTTTATAAACATTCTAAGAATCCTGATGAGAAAACCTAGAAGTCAAGA
 AACAGAGGAAATGAAACACACCATTATAAGCGCTGGCAAGTCCACCTCTGCTGATCCCTCTCTTT
 GGCATCCACTACATTGTCTTCGCTTCTCCCGAGGGTGCCATGGAGGTCCAGCTGTTCTTTGAATTGG
 CCCTGGGCTCCTCCAGGGCTGTGGTGTGCTGCTCTTACTGCTTCTCAATGGTGGAGTGAAGTTCA
 GAAAAAATGGCGCCAGTGGCACCTCAAAGAGTTCCCGCTGCGCCCTGTGGCCCTCAGCAACTCTTCAGC
 AACGCCACCAACGGCCCCACCCACAGCACCAAGGCTGGCACCTCTGAGCAGAGCCGGAGCATCCCGGGG
 CCAATGTCATC

AG**GCGACCG**ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR207131 protein sequence
 Red=Cloning site Green=Tags(s)

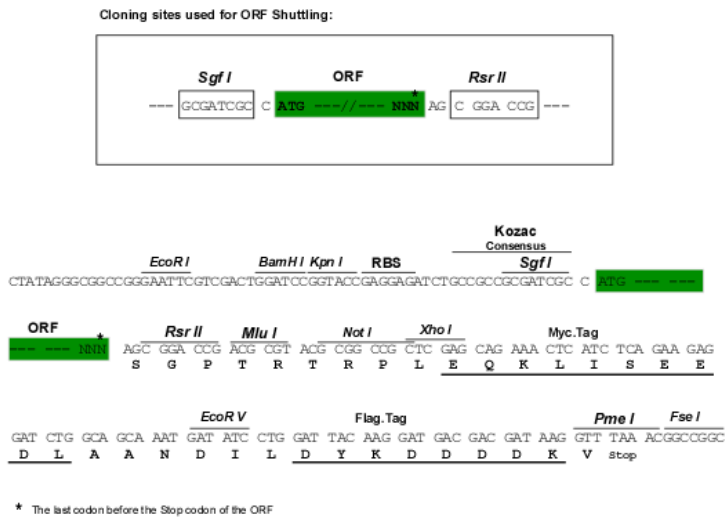
MLSTMSPRLSLLLLWLLLLINAHPVGLPRLCDVRRVLLLEERAELRELSEEKALGPKTASGCERFWD
 NMSCWPSSALAQTVVEPCPKFLRMFSGRNGSLFRNCTKDGWSETFPRPDLAGVNMNGSFNERRHAYLLK
 LKVMYTVGYSSSLAMLLVALSILCSFRRLHCTRNYIHMHLFVSFILRALSNFIKDAVLPADDVTYCDAH
 RAGCKLVMIFQYICIMANYAWLLVEGLYLHTLLAISFFSERKCLQAFVLFVWGSPIFVALWAVTRHFLE
 DFGCWDINSNASIWWVIRGPVILSIVINFIFFINILRILMRKLRTQETRGNETHHYKRLAKSTLLLIPLF
 GIHYIVFAFSPEGAMEVQLFFELALGSFQGLVVAVLYCFLNGELEVQKKWRQWHLQEFPLRPVALSNSFS
 NATNGPTHSTKAGTSEQSRSIPGANVI

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-RsrII

Cloning Scheme:



ACCN: BC089355

ORF Size: 1341 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: [BC089355](#), [AAH89355](#)

RefSeq Size: 1834 bp

RefSeq ORF: 1343 bp

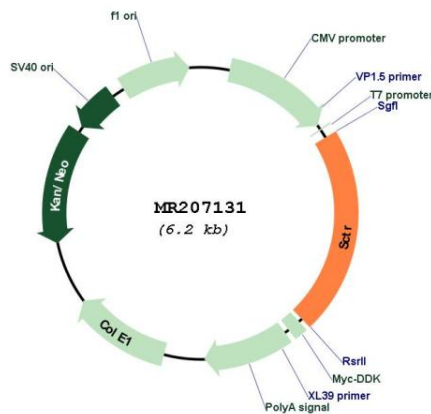
Locus ID: 319229

Cytogenetics: 1 E2.3

MW: 50.9 kDa

Gene Summary: Receptor for secretin (SCT), which is involved in different processes such as regulation of the pH of the duodenal content, food intake and water homeostasis (PubMed:20927047, PubMed:24273196, PubMed:30449620). The activity of this receptor is mediated by G proteins which activate adenylyl cyclase (PubMed:30449620). Upon binding to secretin, regulates the pH of the duodenum by (1) inhibiting the secretion of gastric acid from the parietal cells of the stomach and (2) stimulating the production of bicarbonate (NaHCO₃) from the ductal cells of the pancreas (By similarity). In addition to regulating the pH of the duodenal content, plays a central role in diet induced thermogenesis: acts as a non-sympathetic brown fat (BAT) activator mediating prandial thermogenesis, which consequentially induces satiation (PubMed:30449620). Mechanistically, secretin released by the gut after a meal binds to secretin receptor (SCTR) in brown adipocytes, activating brown fat thermogenesis by stimulating lipolysis, which is sensed in the brain and promotes satiation (PubMed:30449620). Also able to stimulate lipolysis in white adipocytes (PubMed:24273196). Also plays an important role in cellular osmoregulation by regulating renal water reabsorption (PubMed:17283064). Also plays a role in the central nervous system: required for synaptic plasticity (PubMed:17008357).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR207131