

# **Product datasheet for MR207131L4**

### Sctr (BC089355) Mouse Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Sctr (BC089355) Mouse Tagged Lenti ORF Clone

Tag: mGFP Symbol: Sctr

**Synonyms:** 6530402O03Rik

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

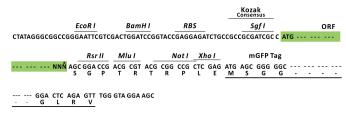
ORF Nucleotide The ORF insert of this clone is exactly the same as(MR207131).

Sequence:

Restriction Sites: Sgfl-Rsrll

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** BC089355 **ORF Size:** 1341 bp



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### Sctr (BC089355) Mouse Tagged Lenti ORF Clone - MR207131L4

**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:** <u>BC089355</u>, <u>AAH89355</u>

RefSeq Size: 1834 bp
RefSeq ORF: 1343 bp
Locus ID: 319229
Cytogenetics: 1 E2.3

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 (NaHCO(3)) 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

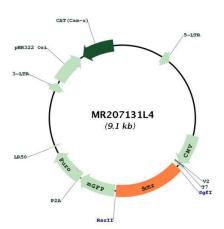
consequentially induces satiation (PubMed:30449620). Mechanistically, secretin released by the gut after a meal binds to secretin receptor (SCTR) in brown adipocytes, activating brown fat thermogenesis by stimulating lipolysis, which is sensed in the brain and promotes satiation (PubMed:30449620). Also 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 MR207131L4