

## Product datasheet for RC214268L1

#### OriGene Technologies, Inc.

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## RET (NM\_020975) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** RET (NM\_020975) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: RET

Synonyms: CDHF12; CDHR16; HSCR1; MEN2A; MEN2B; MTC1; PTC; RET-ELE1

Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC214268).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





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

**ACCN:** NM\_020975

ORF Size: 3342 bp





### RET (NM\_020975) Human Tagged Lenti ORF Clone - RC214268L1

**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:** <u>NM 020975.3</u>

 RefSeq Size:
 5629 bp

 RefSeq ORF:
 3345 bp

 Locus ID:
 5979

 UniProt ID:
 P07949

Cytogenetics: 10q11.21

**Protein Families:** Druggable Genome, Protein Kinase, Transmembrane

**Protein Pathways:** Endocytosis, Pathways in cancer, Thyroid cancer

**MW:** 124.3 kDa

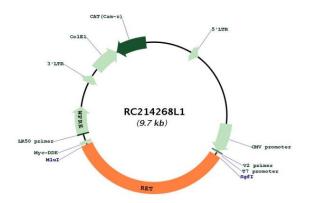
**Gene Summary:** This gene encodes a transmembrane receptor and member of the tyrosine protein kinase

family of proteins. Binding of ligands such as GDNF (glial cell-line derived neurotrophic factor) and other related proteins to the encoded receptor stimulates receptor dimerization and activation of downstream signaling pathways that play a role in cell differentiation, growth, migration and survival. The encoded receptor is important in development of the nervous system, and the development of organs and tissues derived from the neural crest. This proto-oncogene can undergo oncogenic activation through both cytogenetic rearrangement and activating point mutations. Mutations in this gene are associated with Hirschsprung disease and central hypoventilation syndrome and have been identified in patients with renal

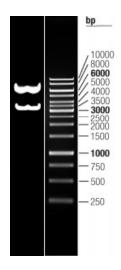
agenesis. [provided by RefSeq, Sep 2017]



# **Product images:**



Circular map for RC214268L1



Double digestion of RC214268L1 using Sgfl and Mlul