

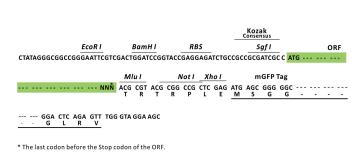
# Product datasheet for RC214268L4

## 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: mGFP Symbol: RET Synonyms: CDHF12; CDHR16; HSCR1; MEN2A; MEN2B; MTC1; PTC; RET-ELE1 **Mammalian Cell** Puromycin Selection: Vector: pLenti-C-mGFP-P2A-Puro (PS100093) E. coli Selection: Chloramphenicol (34 ug/mL) The ORF insert of this clone is exactly the same as(RC214268). **ORF** Nucleotide Sequence: **Restriction Sites:** Sgfl-Mlul **Cloning Scheme:** Cloning sites used for ORF Shuttling: ORF

Sqf I



--- GCG ATC GC C ATG --- //--- NNN ACG CGT ---

Mlu I

ACCN: **ORF Size:**  NM\_020975 3342 bp

### OriGene Technologies, Inc.

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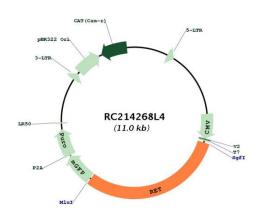
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Service RET (NM_020975) Human Tagged Lenti ORF Clone – RC214268L4	
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can 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. <u>More info</u>
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	<ol> <li>Centrifuge at 5,000xg for 5min.</li> <li>Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>Close the tube and incubate for 10 minutes at room temperature.</li> <li>Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
RefSeq:	<u>NM 020975.3</u>
RefSeq Size:	5629 bp
RefSeq ORF:	3345 bp
Locus ID:	5979
UniProt ID:	<u>P07949</u>
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]

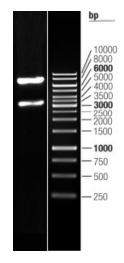
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## **Product images:**



Circular map for RC214268L4



Double digestion of RC214268L4 using Sgfl and Mlul

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