

Product datasheet for RC213772L1

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CD117 (NM 001093772) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CD117 (NM_001093772) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: CD117

Synonyms: C-Kit; CD117; MASTC; PBT; SCFR

Mammalian Cell None

Selection:

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

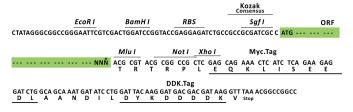
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC213772).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



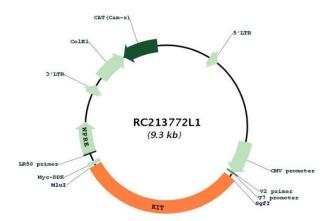


^{*} The last codon before the Stop codon of the ORF.





Plasmid Map:



ACCN: NM_001093772

ORF Size: 2916 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: <u>NM 001093772.1</u>, <u>NP 001087241.1</u>

RefSeq Size: 5178 bp **RefSeq ORF:** 2919 bp



CD117 (NM_001093772) Human Tagged Lenti ORF Clone - RC213772L1

 Locus ID:
 3815

 UniProt ID:
 P10721

 Cytogenetics:
 4q12

Protein Families: Adult stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Protein

Kinase, Stem cell - Pluripotency, Transmembrane

Protein Pathways: Acute myeloid leukemia, Cytokine-cytokine receptor interaction, Endocytosis, Hematopoietic

cell lineage, Melanogenesis, Pathways in cancer

MW: 109.3 kDa

Gene Summary: This gene encodes a receptor tyrosine kinase. This gene was initially identified as a homolog

of the feline sarcoma viral oncogene v-kit and is often referred to as proto-oncogene c-Kit.

The canonical form of this glycosylated transmembrane protein has an N-terminal

extracellular region with five immunoglobulin-like domains, a transmembrane region, and an intracellular tyrosine kinase domain at the C-terminus. Upon activation by its cytokine ligand, stem cell factor (SCF), this protein phosphorylates multiple intracellular proteins that play a role in in the proliferation, differentiation, migration and apoptosis of many cell types and thereby plays an important role in hematopoiesis, stem cell maintenance, gametogenesis, melanogenesis, and in mast cell development, migration and function. This protein can be a

membrane-bound or soluble protein. Mutations in this gene are associated with gastrointestinal stromal tumors, mast cell disease, acute myelogenous leukemia, and

piebaldism. Multiple transcript variants encoding different isoforms have been found for this

gene. [provided by RefSeq, May 2020]