

## Product datasheet for RC213772L3V

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## CD117 (NM\_001093772) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

**Product Name:** CD117 (NM\_001093772) Human Tagged ORF Clone Lentiviral Particle

Symbol: KIT

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

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

Tag: Myc-DDK

**ACCN:** NM\_001093772

ORF Size: 2916 bp

**ORF Nucleotide** 

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

Sequence:

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.

**RefSeq:** NM 001093772.1, NP 001087241.1

RefSeq Size: 5178 bp
RefSeq ORF: 2919 bp
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





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**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]