

Recombinant Human KIT Protein (Gln26-Thr520), C-hFc-tagged

Product Information

Cat IMP-9634

Official Symbol KIT

Product Overview Recombinant human CD117/c-kit protein (Gln26-Thr520) with a Human

IgG1 Fc (Pro100-Lys330) tag at C-terminus was expressed in Chinese

Hamster Ovary cell line.

DescriptionThis 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.

Expression System CHO

Species Human

Tag C-hFc

Predicted N Terminal Gln26

Form Lyophilized from a 0.2 μm filtered solution in PBS.

Molecular Mass Predicted Molecular Mass: 82 kDa SDS-PAGE: 100-120 kDa, under

reducing conditions.

Protein length Gln26-Thr520

Bio-activity Measured by its ability to inhibit SCF-dependent proliferation of TF-1

human erythroleukemic cells. Kitamura, T. et al. (1989) J. Cell Physiol.

140:323. The ED50 for this effect is 30.0-180 ng/mL.

Endotoxin



Purity

Storage

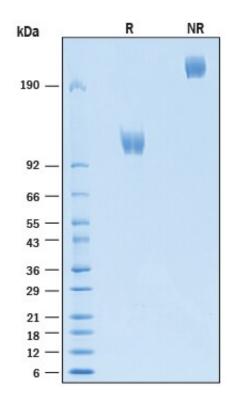
Reconstitution

SDS-PAGE

>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie Blue Staining.

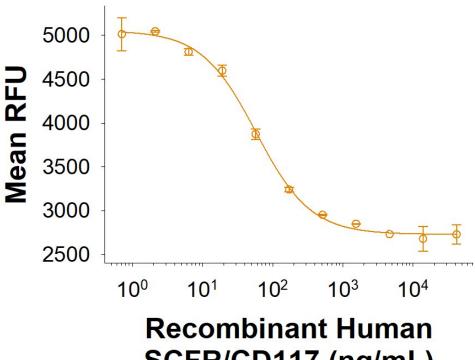
Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.

Reconstitute at 500 µg/mL in PBS.



Bioactivity-ELISA 1





SCFR/CD117 (ng/mL)

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