



# Recombinant Protein Technical Manual

## Recombinant Human c-KIT/CD117 Protein (His Tag)

RPES1013

### Product Data:

**Product SKU:** RPES1013

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** P10721

### Protein Information:

**Molecular Mass:** 56.5 kDa

**AP Molecular Mass:** 150 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 95% as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Mast/stem cell growth factor receptor Kit; SCFR; Piebald trait protein; PBT; Proto-oncogene c-Kit; Tyrosine-protein kinase Kit; p145 c-kit; v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog; CD117;PBT

## Immunogen Information:

**Sequence:** Gln26-Thr520

## Background:

C-Kit/SCF R is a type 3 transmembrane receptor for MGF (mast cell growth factor, also known as stem cell factor). c-Kit contains 5 Ig-like C2-type (immunoglobulin-like) domains and 1 protein kinase domain. It belongs to the protein kinase superfamily and CSF/PDGF receptor subfamily. SCF R expression on mast cells enables them to infiltrate SCF-secreting tumors where they promote tumor growth and induce local immune suppression. SCF R is up-regulated on dendritic cells by Th2-orTh17-biasing stimuli, and it is required for subsequent dendritic cell induction of Th2 and Th17 responses. SCF R protects vascular smooth muscle cells from apoptosis and assists in the recovery of cardiac function following myocardial infarction.