

**Anti-SCFR / c-Kit / CD117 Reference Antibody (LOP628)  
Recombinant Antibody  
Catalog # APR11027**

**Specification**

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**Anti-SCFR / c-Kit / CD117 Reference Antibody (LOP628) - Product Information**

Application	FC, E, FTA
Primary Accession	<a href="#">P10721</a>
Reactivity	Cynomolgus, Human, Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	150 KDa

**Anti-SCFR / c-Kit / CD117 Reference Antibody (LOP628) - Additional Information**

**Target/Specificity**  
SCFR / c-Kit / CD117

**Endotoxin**  
< 0.001EU/ µg,determined by LAL method.

**Conjugation**  
Unconjugated

**Expression system**  
CHO Cell

**Format**  
Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

**Anti-SCFR / c-Kit / CD117 Reference Antibody (LOP628) - Protein Information**

**Name** KIT

**Synonyms** SCFR

**Function**  
Tyrosine-protein kinase that acts as a cell-surface receptor for the cytokine KITLG/SCF and plays an essential role in the regulation of cell survival and proliferation, hematopoiesis, stem cell maintenance, gametogenesis, mast cell development, migration and function, and in melanogenesis. In response to KITLG/SCF binding, KIT can activate several signaling pathways. Phosphorylates PIK3R1, PLCG1, SH2B2/APS and CBL. Activates the AKT1 signaling pathway by phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase. Activated KIT also transmits signals via GRB2 and activation of RAS, RAF1 and the MAP kinases MAPK1/ERK2 and/or MAPK3/ERK1. Promotes activation of STAT family members STAT1, STAT3, STAT5A and STAT5B. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5- trisphosphate. KIT signaling is modulated by protein

phosphatases, and by rapid internalization and degradation of the receptor. Activated KIT promotes phosphorylation of the protein phosphatases PTPN6/SHP-1 and PTPRU, and of the transcription factors STAT1, STAT3, STAT5A and STAT5B. Promotes phosphorylation of PIK3R1, CBL, CRK (isoform Crk-II), LYN, MAPK1/ERK2 and/or MAPK3/ERK1, PLCG1, SRC and SHC1.

#### Cellular Location

[Isoform 1]: Cell membrane; Single-pass type I membrane protein [Isoform 3]: Cytoplasm.

Note=Detected in the cytoplasm of spermatozoa, especially in the equatorial and subacrosomal region of the sperm head.

#### Tissue Location

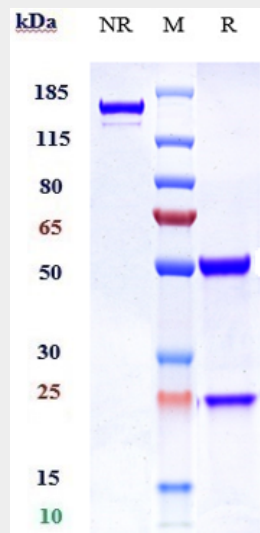
[Isoform 3]: In testis, detected in spermatogonia in the basal layer and in interstitial Leydig cells but not in Sertoli cells or spermatocytes inside the seminiferous tubules (at protein level) (PubMed:20601678). Expression is maintained in ejaculated spermatozoa (at protein level) (PubMed:20601678)

### Anti-SCFR / c-Kit / CD117 Reference Antibody (LOP628) - Protocols

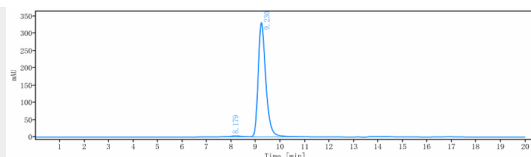
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-SCFR / c-Kit / CD117 Reference Antibody (LOP628) - Images



Anti-SCFR / c-Kit / CD117 Reference Antibody (LOP628) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



The purity of Anti-SCFR / c-Kit / CD117 Reference Antibody (LOP628) is more than 98.4% ,determined by SEC-HPLC.