



Anti-SCFR / c-Kit / CD117 Reference Antibody (CDX-0158)

Recombinant Antibody Catalog # APR11026

Product Information

Application FC, Kinetics, Animal Model

Primary Accession
Reactivity
Human
Clonality
Monoclonal
Isotype
IgG1
Calculated MW
109865

Additional Information

Target/Specificity SCFR / c-Kit / CD117

Endotoxin

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.

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

inosphorylation of PINSK1, CBL, CRN (ISOIOTHI CIK-11), LYN, MAPK1/ERNZ

and/or MAPK3/ERK1, PLCG1, SRC and SHC1.

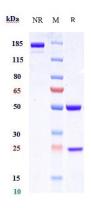
Cellular Location

[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.

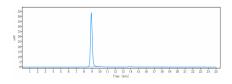
Tissue Location

[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)

Images



Anti-SCFR / c-Kit / CD117 Reference Antibody (CDX-0158) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%



The purity of Anti-SCFR / c-Kit / CD117 Reference Antibody (CDX-0158)is more than 95% ,determined by SEC-HPLC.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.