

**Anti-CD117 (pY936) Antibody**  
Rabbit polyclonal antibody to CD117 (pY936)  
Catalog # AP61141

## Specification

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### Anti-CD117 (pY936) Antibody - Product Information

Application	WB
Primary Accession	<a href="#">P10721</a>
Reactivity	Human, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	109865

### Anti-CD117 (pY936) Antibody - Additional Information

Gene ID 3815

#### Other Names

SCFR; 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

#### Target/Specificity

Recognizes endogenous levels of CD117 (pY936) protein.

#### Dilution

WB~~WB (1/500 - 1/1000), IH (1/50 - 1/200)

#### Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

#### Storage

Store at -20 °C. Stable for 12 months from date of receipt

### Anti-CD117 (pY936) Antibody - 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

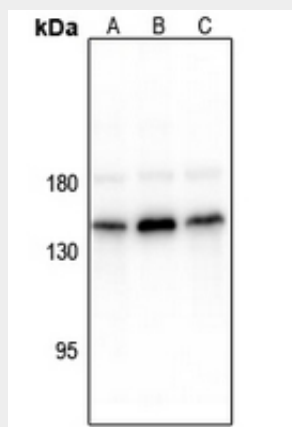
[Isoform 3]: In testis, detected in spermatogonia in the basal layer and in interstitial Leydig cells but not in Sertoli cells or spermatocytes inside the seminiferous tubules (at protein level) (PubMed:20601678). Expression is maintained in ejaculated spermatozoa (at protein level) (PubMed:20601678)

### Anti-CD117 (pY936) Antibody - Protocols

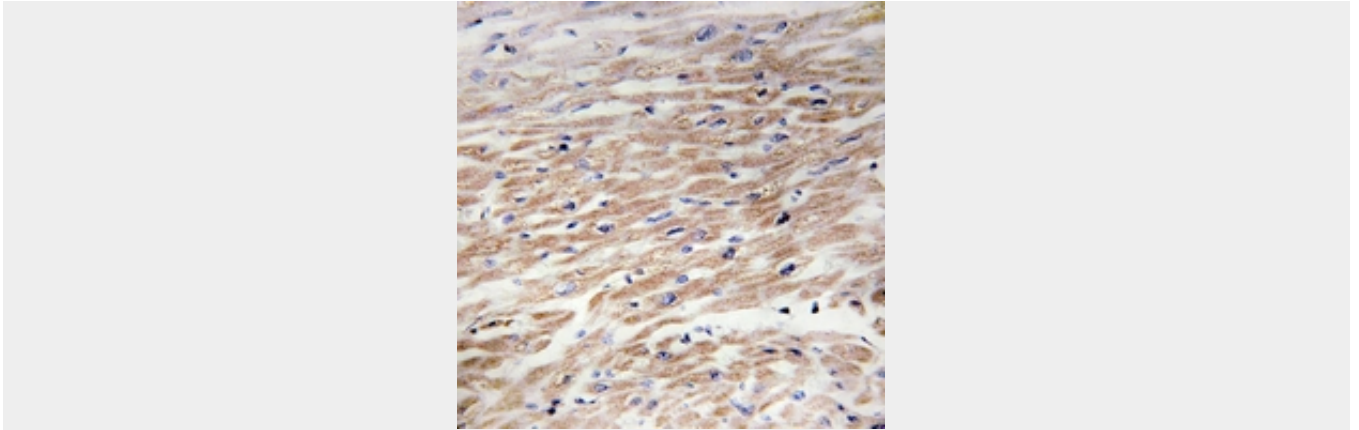
Provided below are standard protocols that you may find useful for product applications.

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

### Anti-CD117 (pY936) Antibody - Images



Western blot analysis of CD117 (pY936) expression in A375 (A), SGC7901 (B), A2780 (C) whole cell lysates.



Immunohistochemical analysis of CD117 (pY936) staining in human heart formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

#### **Anti-CD117 (pY936) Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human CD117 (pY936). The exact sequence is proprietary.