For Research Use Only

## CD117/c-Kit Recombinant antibody, PBS Only (Capture)

Catalog Number:84259-3-PBS



**Purification Method:** 

CloneNo.:

241312A12

Protein A purification

**Basic Information** 

Catalog Number: GenBank Accession Number:

84259-3-PBS BC071593

Size: GeneID (NCBI): 100ug , Concentration: 1 mg/ml by 3815

Nanodrop; UNIPROT ID:
Source: P10721
Rabbit Full Name:

Isotype: v-kit Hardy-Zuckerman 4 feline IgG sarcoma viral oncogene homolog

Calculated MW: 976 aa, 110 kDa

**Applications** 

**Tested Applications:** 

IHC, IF/ICC, Cytometric bead array, Indirect ELISA

Species Specificity:

human

**Product Information** 

84259-3-PBS targets CD117/c-Kit as part of a matched antibody pair:

MP01171-1: 84259-3-PBS capture and 84259-2-PBS detection (validated in Cytometric bead array)

MP01171-2: 84259-3-PBS capture and 84259-1-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

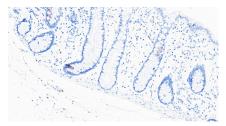
## **Background Information**

CD117, also known as c-Kit and SCFR, is a transmembrane protein with tyrosine kinase activity encoded by the oncogene c-kit (PMID: 2448137). It is a member of the type III receptor tyrosine kinase family, which also includes CSF-1R, PDGFRB, PDGFRB, and FLT3 (PMID: 29518044). CD117 is expressed on hematopoietic stem cells and progenitor cells, mast cells, and is also found in a wide range of non-haemopoietic cell types (including melanocytes, germ cells, astrocytes, renal tubules, breast glandular epithelial cells, sweat glands, and interstitial cells of Cajal) (PMID: 10582338; 23073628). CD117 plays an important role in early hemopoiesis. It is also involved in pigmentation, fertility, gut movement, and some aspects of the nervous system (PMID: 23073628).

Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

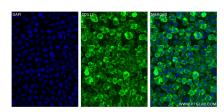
## Selected Validation Data



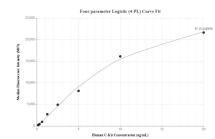
Immunohistochemical analysis of paraffinembedded human colon tissue slide using 84259-3-RR (CD117/c-Kit antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84259-3-PBS in a different storage buffer formulation.



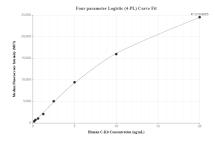
Immunohistochemical analysis of paraffinembedded human colon tissue slide using 84259-3-RR (CD117/c-Kit antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84259-3-PBS in a different storage buffer formulation.



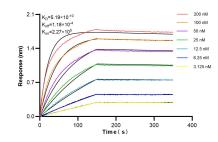
Immunofluorescent analysis of (4% PFA) fixed Mo7e cells using CD117/c-Kit antibody (84259-3-RR, Clone: 241312A12) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 84259-3-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP01171-1, CD117/c-Kit Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84259-3-PBS. Detection antibody: 84259-2-PBS. Standard: RP02323. Range: 0.156-20 ng/mL



Cytometric bead array standard curve of MP01171-2, CD117/c-Kit Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84259-3-PBS. Detection antibody: 84259-1-PBS. Standard: RP02323. Range: 0.156-20 ng/mL



Biolayer interferometry (BLI) kinetic assays of 84259-3-RR against Human CD117/c-Kit were performed. The affinity constant is 0.519 nM.