For Research Use Only

## Rat SCF Recombinant antibody, PBS Only (Detector)

Catalog Number:83707-2-PBS



**Purification Method:** 

Protein A purification

CloneNo.:

240787H1

**Basic Information** 

Catalog Number: 83707-2-PBS

Size: 1 mg/ml GenBank Accession Number:

NM\_021843.4

GeneID (NCBI):

60427

Source: **UNIPROT ID:** Rabbit P21581-1

Full Name: Isotype: KIT ligand

> Calculated MW: 31kDa

Observed MW:

28 kDa, 45 kDa

**Applications** 

**Tested Applications:** 

WB, Cytometric bead array, Sandwich ELISA, Indirect

ELISA, Sample test

**Species Specificity:** 

human, mouse, rat

## **Background Information**

Stem cell factor (SCF) also known as mast cell growth factor, steel factor, and kit ligand, is a hematopoietic growth  $factor. \ SCF \ is \ a \ critical \ protein \ with \ key \ roles \ in \ the \ cell \ such \ as \ hematopoies is, \ gametogenesis \ and \ melanogenesis.$ SCF activates multiple signal pathways by binding with c-kit receptor. SCF and its receptor, c-kit ligand (KL), are upregulated in particular human malignancies including gastrointestinal stromal tumor (GISTs), breast cancer, hematopoietic cell, myeloid leukaemia, and glioma. The SCF/c-KIT system also plays a relevant role in cell fate decision, and its activity is widely known to control cell proliferation, differentiation, survival and apoptosis. SCF is a 35 to 45 kDa monomeric glycoprotein.

Storage

Storage:

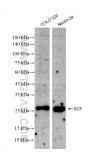
Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

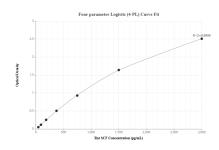
Storage Buffer:

PBS Only

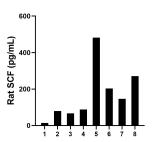
## **Selected Validation Data**



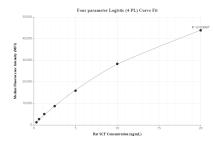
Various lysates were subjected to SDS PAGE followed by western blot with 83707-2-RR (SCF antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83707-2-PBS in a different storage buffer formulation.



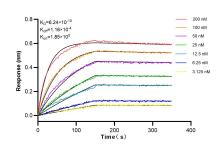
Sandwich ELISA standard curve of MP00664-1, Rat SCF Recombinant Matched Antibody Pair - PBS only. 83707-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg1092. 83707-2-PBS was HRP conjugated as the detection antibody. Range: 46.9-3000 pg/mL



Serum of eight rats was measured. The rat SCF concentration of detected samples was determined to be 191.0 pg/mL with a range of 14.0 - 481.6 pg/mL



Cytometric bead array standard curve of MP00664-1, RAT SCF Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83707-1-PBS. Detection antibody: 83707-2-PBS. Standard: Eg1092. Range: 0.313-20 ng/mL



Biolayer interferometry (BLL) kinetic assays of 83707-2-RR against Rat SCF were performed. The affinity constant is 0.624 nM.