



# Rat Anti-Mouse c-Kit (CD117) Monoclonal antibody, clone 2B8 (CABT-L4347)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

### Product Overview

The 2B8 monoclonal antibody reacts with mouse c-Kit also known as CD117, Steel factor receptor, stem cell factor receptor, and mast cell growth factor. c-Kit is a 145 kDa transmembrane tyrosine kinase and an immunoglobulin superfamily member. c-Kit is expressed on hematopoietic progenitor cells, mast cells, and acute myeloid leukemia (AML) cells. The interaction of the c-Kit receptor and its ligand stem cell factor (SCF), promotes the proliferation and differentiation of hematopoietic progenitor cells.

<b>Target</b>	Mouse c-Kit (CD117)
<b>Immunogen</b>	Mouse bone marrow mast cells
<b>Isotype</b>	IgG2b, κ
<b>Source/Host</b>	Rat
<b>Species Reactivity</b>	Mouse
<b>Clone</b>	2B8
<b>Purification</b>	Protein G purified. Purity>95%. Determined by SDS-PAGE
<b>Conjugate</b>	Functional Grade
<b>Applications</b>	FC, IF, Immunohistochemistry
<b>Molecular Weight</b>	150 kDa
<b>Format</b>	0.2 µM filtered liquid. Purified from tissue culture supernatant in an animal free facility
<b>Concentration</b>	Lot specific

<b>Size</b>	5 mg
<b>Buffer</b>	PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free]  Endotoxin level: <2EU/mg (<0.002EU/µg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB04
<b>Preservative</b>	None
<b>Storage</b>	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
<b>Ship</b>	Wet ice

## BACKGROUND

<b>Introduction</b>	This gene encodes the human homolog of the proto-oncogene c-kit. C-kit was first identified as the cellular homolog of the feline sarcoma viral oncogene v-kit. This protein is a type 3 transmembrane receptor for MGF (mast cell growth factor, also known as stem cell factor). Mutations in this gene are associated with gastrointestinal stromal tumors, mast cell disease, acute myelogenous leukemia, and piebaldism. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]
<b>Keywords</b>	KIT;v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog;PBT;SCFR;C-Kit;CD117;mast/stem cell growth factor receptor Kit;p145 c-kit;proto-oncogene c-Kit;piebald trait protein

## GENE INFORMATION

<b>Official Symbol</b>	v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog
<b>Synonyms</b>	KIT; v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog; PBT; SCFR; C-Kit; CD117; mast/stem cell growth factor receptor Kit; p145 c-kit; proto-oncogene c-Kit; piebald trait protein
<b>References</b>	Siracusa, M. C., et al. (2013). "Thymic stromal lymphopoietin-mediated extramedullary hematopoiesis promotes allergic inflammation." <i>Immunity</i> 39(6): 1158-1170. PubMed;