

# Datasheet: AHP2566 BATCH NUMBER 141528

Description:	RABBIT ANTI CD117 (pTyr721)
Specificity:	CD117 (pTyr721)
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	50 μl

Human

### **Product Details**

### **Applications**

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Western Blotting				1/500 - 1/2000

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

0			
Species Cross			
Reactivity			

**Target Species** 

Based on sequence similarity, is expected to react with: Mouse, Rat

**N.B.** Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

|--|--|--|

**Antiserum Preparation** Antiserum to CD117 (pTyr721) was raised by repeated immunization of rabbits with highly purified antigen. Purified IgG was prepared from whole serum by affinity chromatography.

Buffer Solution	Phosphate buffered saline	
Preservative	0.02% Sodium Azide	
Stabilisers	50% Glycerol	

In	nn	าน	no	ge	en
----	----	----	----	----	----

Phospho specific-peptide corresponding to residues surrounding tyrosine 721 of human CD117

### **External Database**

Links

**UniProt:** 

P10721 Related reagents

**Entrez Gene:** 

3815 KIT Related reagents

### **Specificity**

Rabbit anti CD117 (pTyr721) antibody recognizes CD117, also known as protooncogene c-kit, mast/stem cell growth factor receptor Kit, Piebald trait protein and v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog, when phosphorylated at tyrosine 721. CD117 is a member of the tyrosine protein kinase family and is the receptor for stem cell factor (SCF).

Upon binding of SCF, CD117 activates a number of cell signaling pathways including MAP kinase, PI3K and JAK/STAT pathways (Laing et al. 2013).

SCF binding induces autophosphorylation of CD117 at tyrosine 568, tyrosine 570, tyrosine 721 and tyrosine 730. Phosphorylation of tyrosine 721 of CD117 is important for the binding and activation of PI-3 kinase p85 subunit alpha (<u>Lennartsson and Rönnstrand</u>, 2012).

### **Further Reading**

- 1. Liang, J. *et al.* (2013) The C-kit receptor-mediated signal transduction and tumor-related diseases Int J Biol Sci. 9 (5): 435-43.
- 2. Lennartsson, J. & Rönnstrand, L. (2012) Stem cell factor receptor/c-Kit: from basic science to clinical implications <a href="Physiol Rev. 92">Physiol Rev. 92</a> (4): 1619-49.

#### Storage

Store at -20°C

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

### Guarantee

12 months from date of despatch

## Health And Safety Information

Material Safety Datasheet documentation #10049 available at:

https://www.bio-rad-antibodies.com/SDS/AHP2566

10049

### Regulatory

For research purposes only

### Related Products

### **Recommended Secondary Antibodies**

Sheep Anti Rabbit IgG (STAR34...) FITC Goat Anti Rabbit IgG (H/L) (STAR124...) HRP

Goat Anti Rabbit IgG (Fc) (STAR121...) Biotin, FITC, HRP

Sheep Anti Rabbit IgG (STAR35...) RPE

Sheep Anti Rabbit IgG (STAR36...) <u>DyLight®488</u>, <u>DyLight®680</u>, <u>DyLight®800</u>

### **Recommended Useful Reagents**

### TidyBlot WESTERN BLOT DETECTION REAGENT:HRP (STAR209P)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M344130:190111'

### Printed on 18 Jan 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint