

## DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Detects human and mouse CD117/c-kit in direct ELISAs and Western blots. In direct ELISAs, approximately 15% cross-reactivity with recombinant human CD117 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse CD117/c-kit Gln25-Thr519 (Ala207Glu) Accession # P05532
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

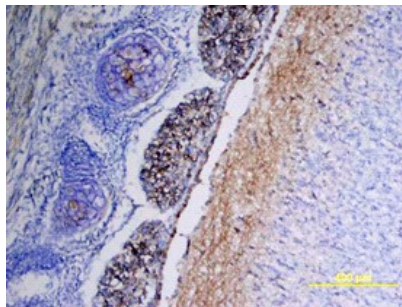
## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
<b>Western Blot</b>	0.1 µg/mL	See Below
<b>Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	Lineage depleted mouse bone marrow cells
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below
<b>Simple Western</b>	5 µg/mL	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

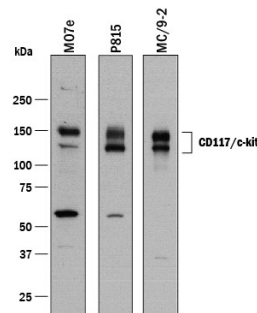
## DATA

### Immunohistochemistry



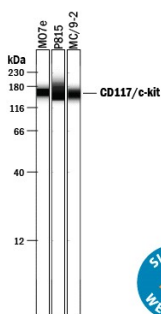
**CD117/c-kit in Mouse Embryo.** CD117/c-kit was detected in immersion fixed frozen sections of mouse embryo using Goat Anti-Human/Mouse CD117/c-kit Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1356) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

### Western Blot



**Detection of Human and Mouse CD117/c-kit by Western Blot.** Western blot shows lysates of MO7e human megakaryocytic leukemic cell line, P815 mouse mastocytoma cell line, and MC/9-2 mouse mast cell line. PVDF membrane was probed with 0.1 µg/mL of Goat Anti-Human/Mouse CD117/c-kit Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1356) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). Specific bands were detected for CD117/c-kit at approximately 135, 150 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

### Simple Western



**Detection of Human and Mouse CD117/c-kit by Simple Western™.** Simple Western lane view shows lysates of MO7e human megakaryocytic leukemic cell line, P815 mouse mastocytoma cell line and MC/9-2 mouse mast cell line, loaded at 0.2 mg/mL. A specific band was detected for CD117/c-kit at approximately 150-165 kDa (as indicated) using 5 µg/mL of Goat Anti-Human/Mouse CD117/c-kit Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1356) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Stem cell factor receptor (CD117, the gene product of the c-kit protooncogene) and its ligand, stem cell factor (also named c-kit ligand, mast cell growth factor), play essential roles in gametogenesis, melanogenesis and hematopoiesis. It is a transmembrane tyrosine kinase that is expressed on endothelial cells, mast cells, megakaryocytes, stem cells and multiple embryonic cells, such as melanoblasts and primordial germ cells.