

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CD117/c-kit in direct ELISAs.
Source	Monoclonal Rat IgG _{2A} Clone # 180627
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse CD117/c-kit Gln25-Thr519 (Ala207Glu) Accession # P05532
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

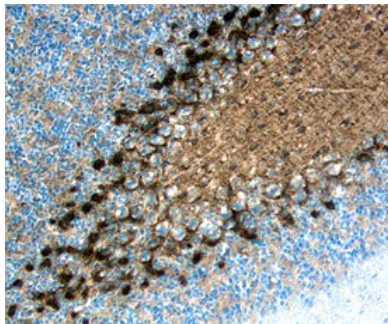
APPLICATIONS

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
Western Blot	1 µg/mL	Recombinant Mouse CD117/c-kit under non-reducing conditions only
Flow Cytometry	2.5 µg/10 ⁶ cells	Lineage depleted mouse bone marrow cells
Immunohistochemistry	8-25 µg/mL	See Below
CyTOF-ready	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 Brain.
CD117/c-kit was detected in perfusion fixed frozen sections of mouse brain (cerebellum) using 10 µg/mL Rat Anti-Mouse CD117/c-kit Monoclonal Antibody (Catalog # MAB1356) overnight at 4 °C. Tissue was stained with the Anti-Rat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS017) and counterstained with hematoxylin (blue). Specific labeling was localized to Bergmann glial cells located around Purkinje cells. View our protocol for Chromogenic IHC Staining of Frozen Tissue Sections.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

SCF R is also known as the c-kit proto-oncogene protein and as CD117. Together with its ligand, stem cell factor (also called c-kit ligand or mast cell growth factor), SCF R plays an essential role in gametogenesis, melanogenesis, and hematopoiesis. SCF R is expressed in hematopoietic progenitor cells, normal B and T lymphocyte progenitors, mast cells, germ cells, melanocytes, neurons, glial cells, placenta, kidney, lung, and gut. In addition, SCF R expression has also been reported in several human tumor cell lines (1,2).

References:

1. Broudy, V. (1997) Blood **90**:1345.
2. Vliagoftis, H. et al. (1997) J. Allergy Clin. Immunol. **100**:435.