

CD117 (c-Kit) Monoclonal Antibody (ACK2), PE-Cyanine7, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), PE-Cyanine7, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	ACK2
Conjugate	PE-Cyanine7
Excitation/Emission Max	569/780 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_469646

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	1 µg/test	15 Publications

Product Specific Information

Description: The ACK2 monoclonal antibody reacts with mouse CD117, also known as c-Kit receptor, Steel factor receptor and stem cell factor receptor. A member of the tyrosine kinase receptor family, this 145 kDa molecule is expressed by a majority of hematopoietic progenitor cells characterized in the mouse bone marrow as a small subset of cells positive for Sca-1 and Thy1 (Thy1^{lo}) and negative for lineage markers. The interaction of the mouse c-kit receptor and steel factor promotes the proliferation and differentiation of hematopoietic progenitor cells. CD117 is also expressed by mast cells and plays a role in signaling and activation of these cells. ACK2 has been reported to be a blocking antibody.

Applications Reported: The ACK2 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This ACK2 antibody has been tested by flow cytometric analysis of mouse bone marrow cells. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Light sensitivity: This tandem dye is sensitive photo-induced oxidation. Please protect this vial and stained samples from light.

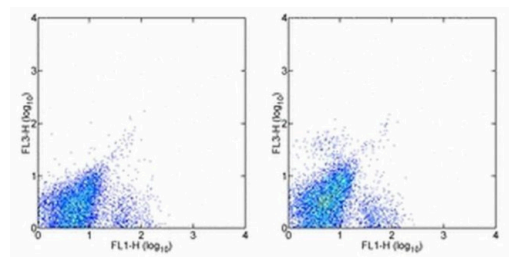
Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency /compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific

performance should be determined empirically.

Excitation: 488-561 nm; Emission: 775 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD117 (c-Kit) Monoclonal Antibody (ACK2), PE-Cyanine7, eBioscience™



CD117 (c-Kit) Antibody (25-1172-82) in Flow
Staining of C57BL/6 bone marrow cells with Anti-Human/Mouse CD45R (B220) FITC (Product # 11-0452-82) and 0.5 µg of Rat IgG2b K Isotype Control PE-Cyanine7 (Product # 25-4031-82) (left) or 0.5 µg of Anti-Mouse CD117 (c-Kit) PE-Cyanine7 (right). Total viable cells were used for analysis.

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15 References

Flow Cytometry (15)

Cell death & disease	Year 2021
The AML-associated K313 mutation enhances C/EBP activity by leading to C/EBP overexpression.	
"Published figure using CD117 (c-Kit) monoclonal antibody (Product # 25-1172-82) in Flow Cytometry"	
Authors: Gentle IE, Moelter I, Badr MT, Döhner K, Lübbert M, Häcker G	
Haematologica	Year 2021
The lifespan quantitative trait locus gene <i>Securin</i> controls hematopoietic progenitor cell function.	
"Published figure using CD117 (c-Kit) monoclonal antibody (Product # 25-1172-82) in Flow Cytometry"	
Authors: Brown A, Schuetz D, Han Y, Daria D, Nattamai KJ, Eiwen K, Sakk V, Pospiech J, Saller T, van Zant G, Wagner W, Geiger H	

[View more Flow references on thermofisher.com](#)

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