

MERTK Monoclonal Antibody (DS5MMER), PE-Cyanine7, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotope	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PE-Cyanine7, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	DS5MMER
Conjugate	PE-Cyanine7
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_2573466

Applications	Tested	Dilution	Published
Flow Cytometry (Flow)	✓	0.5 µg/test	3 Publications

Product Specific Information

Description: This DS5MMER monoclonal antibody recognizes mouse MerTK, a 170-210 kDa member of the TAM family of tyrosine kinase receptors that also includes Axl and Tyro3. MerTK is expressed on tissue macrophages and is involved in the removal of apoptotic cells. This process relies on two soluble ligands of MerTK, Protein S and Gas6 that bind to phosphatidylserine found on the outer leaflet of the plasma membrane of cells undergoing apoptosis. Upon binding these ligands, MerTK undergoes autophosphorylation at multiple tyrosine residues that activate the PI3K and Akt pathways. This results in the phagocytosis of apoptotic cells and also results in the direct inhibition of TLR-induced production of pro-inflammatory cytokines. In addition, MerTK may function as a putative entry receptor for filoviruses. Deficiency of MerTK causes general autoimmunity, inflammation and accumulation of apoptotic bodies. MerTK is constitutively released from the cell surface by metalloproteinases and thus is present in the serum and culture medium. This process can be enhanced by stimulation with LPS. MerTK can be used to help discriminate macrophages from dendritic cells. MerTK is often expressed on malignant cells and may be implicated in immune evasion.

The DS5MMER antibody will work on paraformaldehyde-fixed cells.

Applications Reported: This DS5MMER antibody has been reported for use in flow cytometric analysis.

Applications Tested: This DS5MMER antibody has been tested by flow cytometric analysis of mouse resident peritoneal cells. This can be used at less than or equal to 0.5 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.

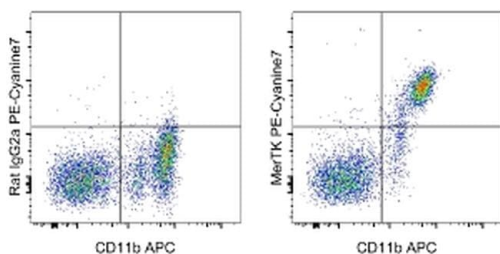
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL of cell sample + 100 µL of 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 MERTK Monoclonal Antibody (DS5MMER), PE-Cyanine7, eBioscience™



MERTK Antibody (25-5751-82) in Flow

Staining of mouse resident peritoneal exudate cells with Anti-Mouse CD11b APC (Product # 17-0112-82) and 0.25 µg of Rat IgG2a K Isotype Control PE-Cyanine7 (Product # 25-4321-82) (left) or 0.25 µg of Anti-Mouse MerTK PE-Cyanine7 (right). Total viable cells were used for analysis.

3 References

Flow Cytometry (3)

Immunity

High-Dimensional Single-Cell Mapping of Central Nervous System Immune Cells Reveals Distinct Myeloid Subsets in Health, Aging, and Disease.

Authors: Mrdjen D, Pavlovic A, Hartmann FJ, Schreiner B, Utz SG, Leung BP, Lelios I, Heppner FL, Kipnis J, Merkler D, Greter M, Becher B

Species
Mouse

Dilution
Not Cited

Year
2018

JCI insight

iRhom2-mediated proinflammatory signalling regulates heart repair following myocardial infarction.

"Published figure using MERTK monoclonal antibody (Product # 25-5751-82) in Flow Cytometry"

Authors: Barnette DN, Cahill TJ, Gunadasa-Rohling M, Carr CA, Freeman M, Riley PR

Species
Mouse
Not Applicable

Dilution
1:100
Not Cited

Year
2018

[View more Flow references on thermofisher.com](https://www.thermofisher.com)

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.