

MERTK Monoclonal Antibody (DS5MMER), eBioscience™

Product Details

Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2a, kappa
Class	Monoclonal
Type	Antibody
Clone	DS5MMER
Conjugate	Unconjugated
Immunogen	FC-tagged full protein expressed in insect cells
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_2688282

Applications	Tested Dilution	Publications
Western Blot (WB)	Assay-Dependent	1 Publication
Immunohistochemistry (IHC)	-	5 Publications
Immunohistochemistry (Frozen) (IHC (F))	5 µg/mL	-
Immunocytochemistry (ICC/IF)	5 µg/mL	2 Publications
Flow Cytometry (Flow)	Assay-Dependent	5 Publications
Immunoprecipitation (IP)	Assay-Dependent	1 Publication

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. In addition, this antibody was demonstrated to inhibit Gas6-induced MerTK phosphorylation with the IC₅₀ < 5 nM. The DS5MMER antibody also works in western blotting and immunoprecipitation.

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

staining, immunohistochemical staining of frozen tissue sections, western blotting and immunoprecipitation. Fluorochrome-conjugated DS5MMER is recommended for use in flow cytometry.

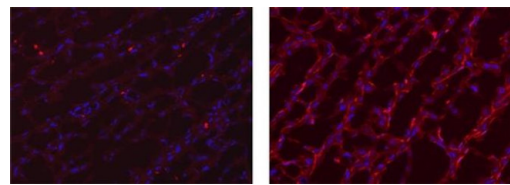
Applications Tested: This DS5MMER antibody has been tested by immunohistochemistry on frozen mouse tissue and can be used at less than or equal to 5 µg/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Purity: Greater than 90%, as determined by SDS-PAGE.

Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For MERTK Monoclonal Antibody (DS5MMER), eBioscience™



MERTK Antibody (14-5751-82) in IHC (F)
Immunohistochemistry of frozen mouse liver using 5 µg/mL of Rat IgG2a K Isotype Control Purified (left) or 5 µg/mL of Anti-Mouse MerTK Purified (right) followed by Anti-Rat IgG TRITC. Nuclei are counterstained with DAPI.

[View more figures on thermofisher.cn](https://thermofisher.cn)

Western Blot (1)

<p>Cell death & disease</p> <p>TAM kinase signaling is indispensable for proper skeletal muscle regeneration in mice.</p> <p>"Published figure using MERTK monoclonal antibody (Product # 14-5751-82) in Western Blot"</p> <p>Authors: Al-Zaeed N,Budai Z,Szondy Z,Sarang Z</p>	<p>Year</p> <p>2021</p>
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Immunohistochemistry (5)

<p>eNeuro</p> <p>Microglia Maintain Homeostatic Conditions in the Developing Rostral Migratory Stream.</p> <p>"14-5751-82 was used in Immunohistochemistry-immunofluorescence to illustrate the importance of microglia in maintaining a healthy neuroblast population and an environment permissive to neuroblast migration in the early postnatal RMS."</p> <p>Authors: Meller SJ,Hernandez L,Martin-Lopez E,Kloos ZA,Liberia T,Greer CA</p>	<p>Year</p> <p>2023</p> <p>Species</p> <p>Mouse</p> <p>Dilution</p> <p>1:100</p>
<p>MedComm</p> <p>Single-cell transcriptomics reveals distinct cell response between acute and chronic pulmonary infection of <i>Pseudomonas aeruginosa</i>.</p> <p>"14-5751-82 was used in Immunohistochemistry-immunofluorescence to provide a comprehensive and unbiased immune cellular landscape for respiratory pathogenesis in mice, enabling further understanding of immunologic mechanisms in infection and inflammatory diseases."</p> <p>Authors: Hu X,Wu M,Ma T,Zhang Y,Zou C,Wang R,Zhang Y,Ren Y,Li Q,Liu H,Li H,Wang T,Sun X,Yang Y,Tang M,Li X, Li J,Gao X,Li T,Zhou X</p>	<p>Year</p> <p>2022</p> <p>Species</p> <p>Mouse</p> <p>Dilution</p> <p>1:200</p>

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Immunocytochemistry (2)

<p>Frontiers in microbiology</p> <p>Roles of Sialic Acid, AXL, and MER Receptor Tyrosine Kinases in Mumps Virus Infection of Mouse Sertoli and Leydig Cells.</p> <p>"14-5751 was used in Immunocytochemistry-immunofluorescence to provide novel insights into the mechanisms behind MuV infection and replication in the testis."</p> <p>Authors: Wang F,Chen R,Jiang Q,Wu H,Gong M,Liu W,Yu X,Zhang W,Han R,Liu A,Chen Y,Han D</p>	<p>Year</p> <p>2020</p> <p>Species</p> <p>Mouse</p>
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More applications with references on thermofisher.cn

- Flow (5)
- IP (1)

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