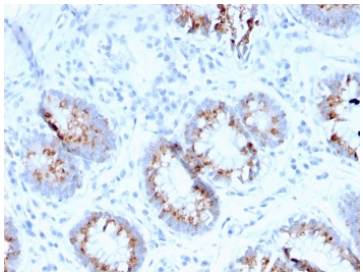
MerTK Antibody MERTK/3015 / MERTK Monoclonal Antibody [clone MERTK/3015] (V7662)

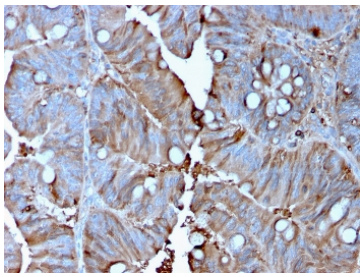
Catalog No.	Formulation	Size
V7662-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7662-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7662SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

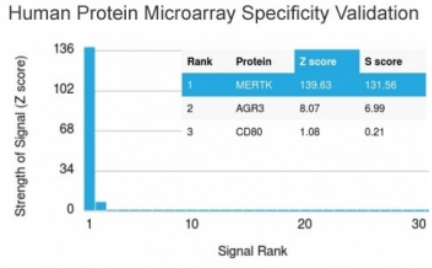
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	MERTK/3015
Purity	Protein G affinity chromatography
UniProt	Q12866
Localization	Cell surface
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This MerTK Antibody MERTK/3015 / MERTK Monoclonal Antibody is available for research use only.



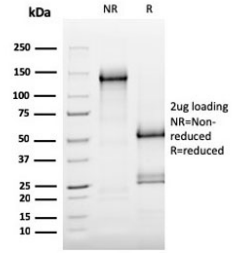
MerTK Antibody MERTK/3015 in Human Colon IHC. Immunohistochemistry of FFPE human colon sections using MerTK Antibody clone MERTK/3015. The image shows distinct brown staining in cells associated with the colonic glandular structures, with comparatively limited staining across the surrounding tissue. The localized staining pattern provides clear contrast against the hematoxylin-counterstained sections and demonstrates detection of MERTK in normal human colon. HIER was performed by boiling sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min before testing.



MerTK Antibody MERTK/3015 in Human Colon Carcinoma IHC. Immunohistochemistry of FFPE human colon carcinoma sections using MerTK Antibody clone MERTK/3015. The tumor shows readily visible brown immunoreactivity across neoplastic glandular structures, with staining distributed through substantial portions of the carcinoma. The pattern demonstrates MERTK detection in malignant colon tissue and complements the normal colon validation for this MERTK Monoclonal Antibody. HIER was performed by boiling sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min before testing.



MerTK Antibody MERTK/3015 Protein Microarray Validation. Protein microarray analysis of MerTK Antibody clone MERTK/3015 using a HuProt array containing more than 19,000 full-length human proteins. MERTK produces the dominant signal, with a Z-score of approximately 119.7 and S-score of approximately 119.0, substantially separated from the next-ranked proteins. The Z-score represents signal strength in standard deviations above the array mean, while the S-score measures separation from the next-highest signal. The exceptionally large separation supports high target specificity and designation of this reagent as Protein Microarray Validated.



MerTK Antibody MERTK/3015 Purity by SDS-PAGE. SDS-PAGE analysis of 2 ug purified, BSA-free MerTK Antibody clone MERTK/3015 under non-reducing (NR) and reducing (R) conditions. The non-reduced sample shows the intact antibody predominantly near the expected ~150 kDa region, while reduction produces the expected immunoglobulin heavy- and light-chain components at approximately 50 kDa and 25 kDa. The gel provides confirmation of antibody integrity and purity and supports the defined monoclonal format of this MERTK Monoclonal Antibody.

Description

MerTK Antibody MERTK/3015 / MERTK Monoclonal Antibody recognizes MER proto-oncogene tyrosine kinase, a member of the TAM receptor tyrosine kinase family together with AXL and TYRO3. MerTK is also known as MERTK, MER, c-Mer and Eyk. The receptor participates in cellular signaling pathways that regulate phagocytosis, survival, migration and immune homeostasis and is particularly important for the recognition and clearance of apoptotic cells.

MerTK is a single-pass transmembrane protein containing two extracellular immunoglobulin-like domains, two fibronectin type III domains and an intracellular tyrosine kinase domain. Its extracellular region interacts indirectly with phosphatidylserine exposed on apoptotic cells through bridging ligands such as GAS6 and Protein S. Receptor activation promotes intracellular signaling that facilitates engulfment of apoptotic material, a process known as efferocytosis, while helping limit inflammatory responses to dying cells.

MERTK function is important in macrophages and other professional phagocytes and also contributes to retinal pigment epithelial cell biology. In the retina, MerTK participates in the phagocytic removal of shed photoreceptor outer segments. Loss-of-function mutations in MERTK can disrupt this process and are associated with inherited retinal degeneration, including forms of retinitis pigmentosa.

Aberrant MERTK expression and signaling are also investigated in cancer biology. Increased receptor activity can promote cell survival and other signaling programs favorable to tumor progression, while MerTK-dependent clearance of apoptotic cells may contribute to an immunosuppressive tumor microenvironment. These functions have made the receptor an important subject in studies of TAM-family signaling, innate immunity, efferocytosis and cancer biology.

NSJ Bioreagents offers clone MERTK/3015 for research into MerTK expression and receptor biology. The MerTK Antibody terminology reflects the commonly used protein designation, while MERTK Monoclonal Antibody emphasizes the official gene symbol and monoclonal format of the reagent.

A MerTK Antibody provides a reagent for investigating MER receptor expression and TAM-family biology, while MERTK Monoclonal Antibody supports research into efferocytosis, immune regulation and receptor tyrosine kinase signaling.

This MerTK Antibody is part of our Innate Immunity Antibodies collection.

Application Notes

Optimal dilution of the MerTK Antibody MERTK/3015 / MERTK Monoclonal Antibody should be determined by the researcher.

Immunogen

A recombinant human partial protein (amino acids 55-148) was used as the immunogen for the MerTK Antibody MERTK/3015.

Storage

Store the MerTK Antibody MERTK/3015 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

MERTK antibody, MER antibody, c-Mer antibody, Mer Receptor Tyrosine Kinase antibody, MER Proto-Oncogene Tyrosine Kinase antibody, Eyk antibody

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