

36-2037: Anti-MerTK (Innate Immune Checkpoint) Monoclonal Antibody (Clone: MERTK/3022)

Clonality :	Monoclonal
Clone Name :	MERTK/3022
Application :	IHC
Reactivity :	Human
Gene :	MERTK
Gene ID :	10461
Uniprot ID :	Q12866
Alternative Name :	cEyk; MER receptor tyrosine kinase; MERK; MERPEN; nmf12; Nyk; Proto-oncogene c-Mer; RP38; STK kinase
Isotype :	Mouse IgG2a
Immunogen Information :	Recombinant human MERTK protein fragment (around aa 55-148) (exact sequence is proprietary)

Description

MerTK, also called c-Mer, is a member of the Mer/Axl/Tyro3 receptor kinase family. It is a 984 residue transmembrane protein made up of one tyrosine kinase domain, two Fibronectin type-III domains and two immunoglobulinlike C2-type domains. MerTK is the mammalian ortholog of the chicken retroviral oncogene product v-Eyk. This protein plays a critical role in macrophage activation, platelet aggregation, clot stability and the efficient removal of apoptotic cells. Specifically, MerTK acts as a signaling molecule, triggering outer segment ingestion in the retinal pigment epithelium (RPE) phagocytic process. Evidence suggests that MerTK signals via interaction with phosphatidylinositol-specific phospholipase C 2). When the gene encoding for MerTK is mutated, the RPE phagocytosis pathway is disrupted and autosomal recessive retinitis pigmentosa (RP) may result, leading to degeneration of retinal photoreceptor cells.

Product Info

Amount :	20 µg / 100 µg
Content :	200µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage condition :	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months.

Application Note

Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95 °C followed by cooling at RT for 20 minutes),

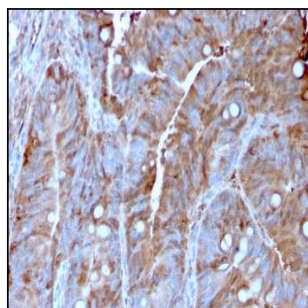


Fig.1: Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with MerTK Mouse Monoclonal Antibody (MERTK/3022).

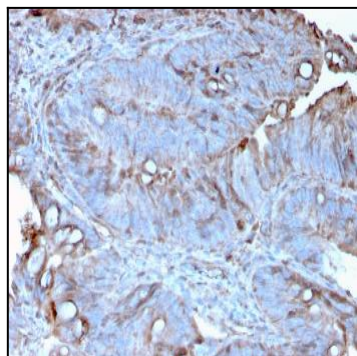


Fig. 2: Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with MerTK Mouse Monoclonal Antibody (MERTK/3022).

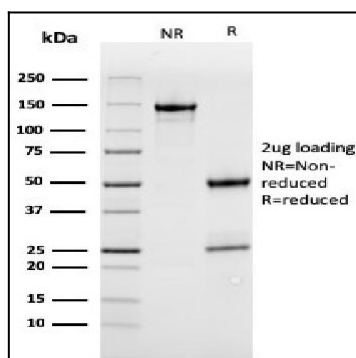


Fig. 3: SDS-PAGE Analysis Purified MerTK Mouse Monoclonal Antibody (MERTK/3022). Confirmation of Purity and Integrity of Antibody.

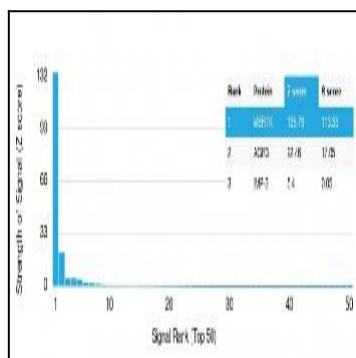


Fig. 4: Analysis of Protein Array containing more than 19,000 full-length human proteins using MerTK Mouse Monoclonal Antibody (MERTK/3022). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.