

## 36-2036: Anti-MerTK (Innate Immune Checkpoint) Monoclonal Antibody (Clone: MERTK/3015)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	MERTK/3015
<b>Application :</b>	IHC
<b>Reactivity :</b>	Human
<b>Gene :</b>	MERTK
<b>Gene ID :</b>	10461
<b>Uniprot ID :</b>	Q12866
<b>Alternative Name :</b>	cEyk; MER receptor tyrosine kinase; MERK; MERPEN; nmf12; Nyk; Proto-oncogene c-Mer; RP38; STK kinase
<b>Isotype :</b>	Mouse IgG2a, kappa
<b>Immunogen Information :</b>	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

<b>Amount :</b>	20 µg / 100 µg
<b>Content :</b>	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.
<b>Storage condition :</b>	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 &degC followed by cooling at RT for 20 minutes),

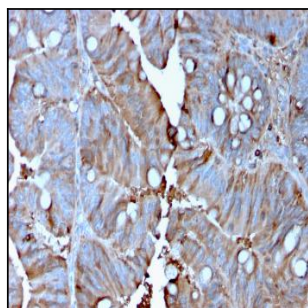


Fig.1: Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with MerTK Mouse Monoclonal Antibody (MERTK/3015).

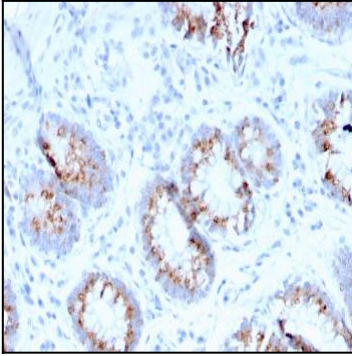


Fig. 2: Formalin-fixed, paraffin-embedded human Colon stained with MerTK Mouse Monoclonal Antibody (MERTK/3015).

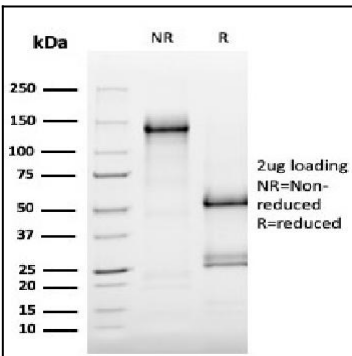


Fig. 3: SDS-PAGE Analysis Purified MerTK Mouse Monoclonal Antibody (MERTK/3015). Confirmation of Purity and Integrity of Antibody.

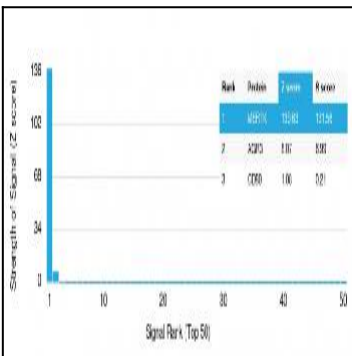


Fig. 4: Analysis of Protein Array containing more than 19,000 full-length human proteins using MerTK Mouse Monoclonal Antibody (MERTK/3015). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary 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.