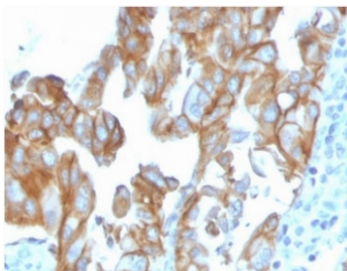


## MerTK Antibody [clone TPKR-1] (V8001)

Catalog No.	Formulation	Size
V8001-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8001-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8001SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

### Bulk quote request

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



IHC staining of FFPE human colon carcinoma with MerTK antibody (clone TPKR-1).  
HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.

## Description

Receptor tyrosine kinase that transduces signals from the extracellular matrix into the cytoplasm by binding to several ligands including LGALS3, TUB, TULP1 or GAS6. Regulates many physiological processes including cell survival, migration, differentiation, and phagocytosis of apoptotic cells (efferocytosis). Ligand binding at the cell surface induces autophosphorylation of MERTK on its intracellular domain that provides docking sites for downstream signaling molecules. Following activation by ligand, interacts with GRB2 or PLCG2 and induces phosphorylation of MAPK1, MAPK2, FAK/PTK2 or RAC1. MERTK signaling plays a role in various processes such as macrophage clearance of apoptotic cells, platelet aggregation, cytoskeleton reorganization and engulfment. Functions in the retinal pigment epithelium (RPE) as a regulator of rod outer segments fragments phagocytosis. Plays also an important role in inhibition of Toll-like receptors (TLRs)-mediated innate immune response by activating STAT1, which selectively induces production of suppressors of cytokine signaling SOCS1 and SOCS3. [UniProt]

## Application Notes

The stated application concentrations are suggested starting points. Titration of the MerTK antibody may be required due to differences in protocols and secondary/substrate sensitivity.

## Immunogen

Amino acids 55-148 were used as the immunogen for the MerTK antibody.

## Storage

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