Anti-Phospho-Tyr<sup>749/753/754</sup> MerTK Antibody

Catalog #: p186-749  
Size: 100 µl

Cite this Antibody: PhosphoSolutions Cat# p186-749: RRID:AB_2744537

### Host
- **Applications**: WB 1:1000
- **Species Tested**: H, M, R

### Species Reactivity* 
- A, B, C, GP, Ha, NHP

### Molecular Weight
- 160 kDa

### Product Description:
Affinity purified rabbit polyclonal antibody.

### Biological Significance:
Along with Tyro-3 and Axl, MerTK is a member of the TAM family of receptor tyrosine kinases (RTKs). The TAM family of RTKs regulates cell proliferation/survival, cell adhesion and migration, and blood clot stabilization processes, along with the regulation of inflammatory cytokine release (Linger et al., 2008). Additionally, the TAM family has been linked to coagulopathy and cancer when altered experimentally or genetically (Linger et al., 2008). Tri-phosphorylation of MerTK at tyr749, tyr753 and tyr754 has been identified as a key target in platelet aggregation for developing a new anti-platelet drug that decreases bleeding complications, which are current side effects of similar drugs on the market today (Zhang et al., 2013). MerTK is also seen as a therapeutic target for treating lymphoblastic leukemias, melanoma, breast, lung, colon, liver, gastric, kidney, ovarian, uterine and brain cancers (Graham et al., 1994). There has recently been increased interest in synthesizing novel ATP-competitive small molecule tyrosine kinase inhibitors to decrease tri-phosphorylation of MerTK at tyr749, tyr753, and tyr754 as a therapeutic target to treat AML (Lee-Sherick et al., 2013).

### Antigen:
Phosphopeptide corresponding to amino acid residues surrounding the phospho-Tyr<sup>749/753/754</sup> of human MerTK.

### Antibody Specificity:
Specific for the ~160 kDa MerTK protein phosphorylated at Tyr<sup>749/753/754</sup>. Due to post-translational modifications of the Mer protein, a significant shift in molecular weight is seen from the predicted molecular weight of 110 kDa. For optimal results immunoprecipitation is recommended due to the 91% homology of the related receptor tyrosine kinase, Axl, that runs at ~140 kDa.

### Purification Method:
Prepared from pooled rabbit serum by affinity purification via sequential chromatography on phospho and non-phosphopeptide affinity columns.

### Quality Control Tests:
Western blots performed on each lot.

### Packaging:
100 µl in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg BSA per ml and 50% glycerol.

### Storage and Stability:
Shipped on blue ice. Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.

**Application Key:** WB = Western Blot  
IF = Immunofluorescence  
IHC = Immunohistochemistry  
IP = Immunoprecipitation

**Species Reactivity Key:**  
All-All Species  
A-Avian  
Amp-Amphibian  
Ar-Arabidopsis  
B-Bovine  
C-Canine  
Ch-Chicken  
D-Drosophila  
GP-Guinea Pig  
H-Human  
Ha-Hamster  
M-Mouse  
NHP-Non-human primate  
P-Pig  
R-Rat  
S-Sheep  
X-Xenopus  
Z-Zebrafish

*Species assumed based on 100% homology with sequence used as antigen  
For Research Use Only
Product Specific References:


General References

