For Research Use Only

MERTK Recombinant antibody, PBS Only (Capture/Detector)

Catalog Number:84156-2-PBS



Purification Method:

Basic Information

Catalog Number: GenBank Accession Number:

84156-2-PBS BC114918 Protein A purification

 Size:
 GeneID (NCBI):
 CloneNo.:

 100ug , Concentration: 1 mg/ml by
 10461
 241252H3

160-180 kDa

Nanodrop; UNIPROT ID:
Source: Q12866
Rabbit Full Name:

Isotype: c-mer proto-oncogene tyrosine kinase
IgG Calculated MM/

IgG Calculated MW:
Immunogen Catalog Number: 999 aa, 110 kDa
AG27540 Observed MW:

Applications

Tested Applications:

WB, IHC, Cytometric bead array, Sandwich ELISA,

Indirect ELISA, Sample test

Species Specificity:

human, mouse

Product Information

84156-2-PBS targets MERTK as part of a matched antibody pair:

MP01061-1: 84156-1-PBS capture and 84156-2-PBS detection (validated in Cytometric bead array)

MP01061-2: 84156-2-PBS capture and 84156-1-PBS detection (validated in Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

Background Information

MerTK (Mer tyrosine kinase), also known as RP38, c-Eyk, c-mer, and Tyro12, was first cloned from a human B lymphoblastoid expression library (PMID:8086340) and is one of the TAM (Tyro-3, Axl, and MerTK) receptor tyrosine kinase (RTK) family (PMID:23833304). Although this RTK, like others, can promote tumor cell proliferation to some extent, MERTK primarily lends tumor cells crucial survival advantages while promoting invasion, migration and metastasis, drug resistance, and, in the innate immune system, suppressing anti-tumor immunity (PMID:32417270). The multiple MERTK species observed are likely due to posttranslational modifications (PMID: 23585477).

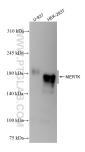
Storage

Storage:

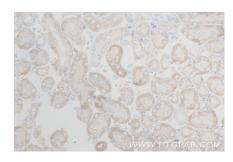
Store at -80°C. Storage Buffer:

PBS Only

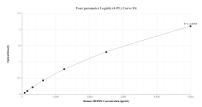
Selected Validation Data



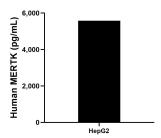
Various lysates were subjected to SDS PAGE followed by western blot with 84156-2-RR (MERTK antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84156-2-PBS in a different storage buffer formulation.



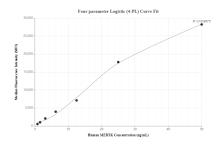
Immunohistochemical analysis of paraffinembedded mouse kidney tissue slide using 84156-2-RR (MERTK antibody) at dilution of 1:250 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84156-2-PBS in a different storage buffer formulation.



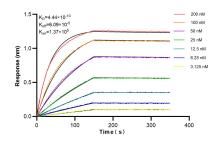
Sandwich ELISA standard curve of MP01061-2, Human MERTK Recombinant Matched Antibody Pair - PBS only. 84156-2-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag27540. 84156-1-PBS was HRP conjugated as the detection antibody. Range: 78.1-5000 pg/mL



The mean MERTK concentration was determined to be 5,583.9 $\,$ pg/mL in HepG2 cell extract based on a 2.3 $\,$ mg/mL extract load.



Cytometric bead array standard curve of MP01061-1, MERTK Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84156-1-PBS. Detection antibody: 84156-2-PBS. Standard: Ag27540. Range: 0.781-50 ng/mL



Biolayer interferometry (BLL) kinetic assays of 84156-2-RR against Human MERTK were performed. The affinity constant is 0.444 nM.