For Research Use Only

MLPH Recombinant antibody, PBS Only (Capture)

Catalog Number:84282-1-PBS



Basic Information

Catalog Number:

GenBank Accession Number:

Purification Method: Protein A purification

241621G4

84282-1-PBS

BC001653 GeneID (NCBI):

CloneNo.:

100ug, Concentration: 1 mg/ml by Nanodrop:

UNIPROT ID: Q9BV36

Rabbit

Full Name: melanophilin

Isotype: IgG

Calculated MW:

Immunogen Catalog Number:

66 kDa

AG32931

Observed MW:

66 kDa, 80 kDa

Applications

Tested Applications:

WB, IHC, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:

human

Product Information

84282-1-PBS targets MLPH as part of a matched antibody pair:

MP01196-3: 84282-1-PBS capture and 84282-4-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.

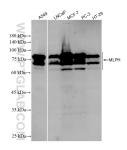
Background Information

Melanophilin (Mlph) is a member of the exophilin subfamily of Rab effector proteins. MLPH is a modular protein, forming a ternary complex with the small Ras-related GTPase Rab27A in its GTP-bound form and the motor protein myosin Va. It regulates retention of melanosomes at the peripheral actin cytoskeleton of melanocytes, a process essential for normal mammalian pigmentation. Defects in MLPH are a cause of Griscelli syndrome type 3 (GS3), which is characterized by a silver-gray hair color and abnormal pigment distribution in the hair shaft.

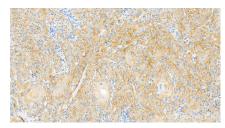
Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

Selected Validation Data



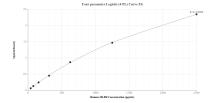
Various lysates were subjected to SDS PAGE followed by western blot with 84282-1-RR (MLPH antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84282-1-PBS in a different storage buffer formulation.



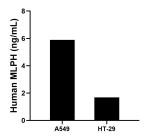
Immunohistochemical analysis of paraffinembedded human skin cancer tissue slide using 84282-1-RR (MLPH antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84282-1-PBS in a different storage buffer formulation.



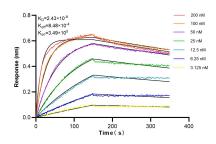
Immunohistochemical analysis of paraffinembedded human skin cancer tissue slide using 84282-1-RR (MLPH antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84282-1-PBS in a different storage buffer formulation.



Sandwich ELISA standard curve of MP01196-3, Human MLPH Recombinant Matched Antibody Pair-PBS only. 84282-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag32931. 84282-4-PBS was HRP conjugated as the detection antibody. Range: 39.1-2500 pg/mL



The mean MLPH concentration was determined to be 5.9 ng/mL in A549 cell extract based on a 1.5 mg/mL extract load and 1.7 ng/mL in HT-29 cell extract based on a 1.5 mg/mL extract load.



Biolayer interferometry (BLI) kinetic assays of 84282-1-RR against Human MLPH were performed. The affinity constant is 2.43 nM.