For Research Use Only

MITF Recombinant antibody, PBS Only (Detector)

Catalog Number:83803-2-PBS



Purification Method:

CloneNo.:

240815E7

Protein A purification

Basic Information

Catalog Number:

83803-2-PBS

100ug , Concentration: 1 mg/ml by

Nanodrop:

Source: Rabbit

Isotype: microphthalmia-associated IgG transcription factor

G transcription factor

Immunogen Catalog Number: Calculated MW:
AG3679 91 aa. 10 kDa. 59 kDa

Observed MW: 60-65 kDa

BC012503

GeneID (NCBI):

UNIPROT ID: 075030

Full Name:

GenBank Accession Number:

Applications

Tested Applications:

IF/ICC, FC (Intra), Cytometric bead array, Indirect

ELISA

Species Specificity:

human

Product Information

83803-2-PBS targets MITF as part of a matched antibody pair:

MP00746-1: 83803-1-PBS capture and 83803-2-PBS detection (validated in Cytometric bead array)

MP00746-3: 83803-3-PBS capture and 83803-2-PBS detection (validated in Cytometric bead array)

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

The retinal pigment epithelium (RPE) has a essential role in maintaining visual function and dedifferentiation of RPE contributes to the pathophysiology of several ocular diseases (PMID:22523078). Microphthalmia-associated transcription factor (MITF) is a key regulator of RPE differentiation that is also down-regulated in dedifferentiated hfRPE cells. MITF is a basic helix-loop-helix (hHLH)-leucine zipper protein that involves in the development of various cell types, including neural crest-derived melanocytes and optic cup-derived retinal pigment epithelial cells (PMID: 10578055).

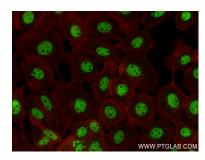
Storage

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

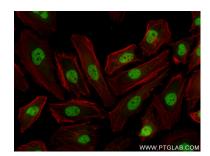
Selected Validation Data



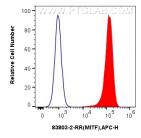
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using MITF antibody (83803-2-RR, Clone: 240815E7) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 83803-2-PBS in a different storage buffer formulation.



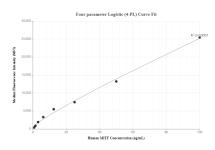
Immunofluorescent analysis of (4% PFA) fixed A431 cells using MITF antibody (83803-2-RR, Clone: 240815E7) at dilution of 1:400 and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA0013-2), Cl594-Phalloidin (red). This data was developed using the same antibody clone with 83803-2-PBS in a different storage buffer formulation.



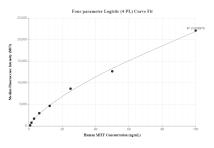
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using MITF antibody (83803-2-RR, Clone: 240815E7) at dilution of 1:400 and Coralite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 83803-2-PBS in a different storage buffer formulation.



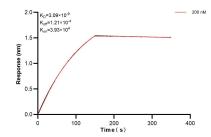
1x10^6 HeLa cells were intracellularly stained with 0.25 ug MITF Recombinant antibody (83803-2-RR, Clone:240815E7) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011). This data was developed using the same antibody clone with 83803-2-PBS in a different storage buffer formulation.



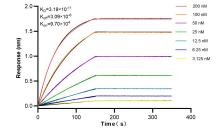
Cytometric bead array standard curve of MP00746-1, MITF Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83803-1-PBS. Detection antibody: 83803-2-PBS. Standard: Ag3679. Range: 0.781-100 ng/mL



Cytometric bead array standard curve of MP00746-3, MITF Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83803-3-PBS. Detection antibody: 83803-2-PBS. Standard: Ag3679. Range: 0.781-100 ng/mL.



Biolayer interferometry (BLL) kinetic assay of 83803-2-PBS against Human MITF was performed. The affinity constant is 3.09 nM.



Biolayer interferometry (BLL) kinetic assays of 83803-2-RR against Human MITF were performed. The affinity constant is 31.9 pM.