For Research Use Only

FOXM1 Recombinant antibody, PBS Only (Capture/Detector)

Catalog Number:84681-1-PBS



Purification Method:

Protein A purification

CloneNo.:

242077A7

Basic Information

Catalog Number: GenBank Accession Number:

84681-1-PBS BC006192

GeneID (NCBI):

100ug, Concentration: 1 mg/ml by Nanodrop: **UNIPROT ID:**

Q08050 Rabbit Full Name: Isotype forkhead box M 1

IgG Calculated MW: Immunogen Catalog Number: 83 kDa

AG3729 Observed MW:

84-110 kDa

Applications

Tested Applications:

WB, FC (Intra), Cytometric bead array, Sandwich ELISA,

Indirect ELISA, Sample test

Species Specificity:

human

Product Information

84681-1-PBS targets FOXM1 as part of a matched antibody pair:

MP01500-1: 84681-1-PBS capture and 84681-2-PBS detection (validated in Cytometric bead array)

MP01500-2: 84681-1-PBS capture and 84681-3-PBS detection (validated in Cytometric bead array)

MP01500-3: 84681-4-PBS capture and 84681-1-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

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

Forkhead box M1 (FOXM1), also named as HNF-3, HFH-11 or Trident, belongs to a superfamily of Fox transcription factors. FOXM1 is strongly as5sociated with cell proliferation, it plays a important role in cell cycle progression by regulating both G1/S and G2/M phases, it is also involved in DNA damage repair, angiogenesis, apoptosis and tissue regeneration. Recently, crucial roles of this transcription factor were found in the development and progression of many cancers including colorectal, lung, prostate, liver and breast cancer. FOXM1 levels are significantly higher and associated with tumor grade in most human tumors, rendering it a potential target of cancer diagnosis and therapies. Catalog#13147-1-AP is a rabbit polyclonal antibody raised against C-terminal of human FOXM1. And this antibody can recognize three kinds of FOXM1, FOXM1-pp($^{-}95$ -110kDa), FOXM1-B(isoform2, $^{-}83$ kDa) and FOXM1A(isoform4, ~90kDa). Sometimes a molecular weight of about 65 kDa can also be observed, which may be a degradation form of FOXM1 (PMID: 26547933).

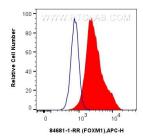
Storage

Storage:

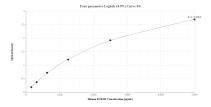
Store at -80°C. Storage Buffer:

PBS Only

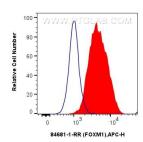
Selected Validation Data



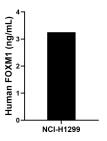
1x10^6 HeLa cells were intracellularly stained with 0.25 ug FOXM1 Recombinant antibody (84681-1-RR, Clone:242077A7) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set. This data was developed using the same antibody clone with 84681-1-PBS in a different storage buffer formulation.



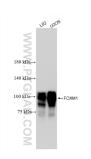
Sandwich ELISA standard curve of MP01500-3, Human FOXM1 Recombinant Matched Antibody Pair - PBS only. 84681-4-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag3729. 84681-1-PBS was HRP conjugated as the detection antibody. Range: 156-5000 pg/mL



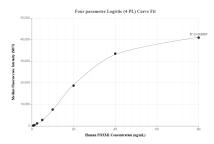
1x10^6 A549 cells were intracellularly stained with 0.25 ug FOXM1 Recombinant antibody (84681-1-RR, Clone:242077A7) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set. This data was developed using the same antibody clone with 84681-1-PBS in a different storage buffer formulation.



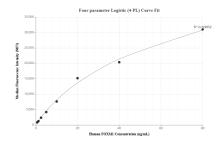
The mean FOXM1 concentration was determined to be 3.3 ng/mL in NCI-H1299 cell extract based on a 1.5 mg/mL extract load.



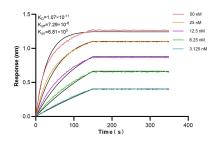
LO2 cells were subjected to SDS PAGE followed by western blot with 84681-1-RR (FOXM1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84681-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP01500-1, FOXM1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84681-1-PBS. Detection antibody: 84681-2-PBS. Standard: Ag3729. Range: 0.625-80 ng/mL.



Cytometric bead array standard curve of MP01500-2, FOXM1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84681-1-PBS. Detection antibody: 84681-3-PBS. Standard: Ag3729. Range: 0.625-80 ng/mL



Biolayer interferometry (BLL) kinetic assays of 84681-1-RR against Human FOXM1 were performed. The affinity constant is 10.7 pM.