For Research Use Only

FOXO1 Recombinant antibody, PBS Only (Capture)

Catalog Number:82997-1-PBS



Purification Method:

Protein A purification

CloneNo.:

230183D1

Basic Information

Catalog Number: 82997-1-PBS

Size:

Isotype:

GenBank Accession Number:

BC021981

GeneID (NCBI):

2308

1mg/ml Source: **UNIPROT ID:** Rabbit

Q12778 Full Name:

Immunogen Catalog Number:

AG13296 655 aa, 70 kDa

Calculated MW: Observed MW:

forkhead box O1

70-80 kDa

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), Cytometric bead array,

Indirect ELISA

Species Specificity:

human

Background Information

FOXO1, also named as FOXO1A, FKHR and FKH1, is a member of the FOXO subfamily of Forkhead transcription factors. FOXO1 is a transcription factor which acts as a regulator of cell responses to oxidative stress. FOXO1interacts with LRPPRC and SIRT1. In the presence of KIRT1, FOXO1 mediates down-regulation of cyclin D1 and upregulation of CDKN1B levels which are required for cell transition from proliferative growth to quiescence. FOXO1 contains three predicted protein kinase B phosphorylation sites (Thr-24, Ser-256, and Ser-319) that are conserved in other FOXO proteins. The t(2;13) and the variant t(1;13) translocations generate PAX3/FKHR and PAX7/FKHR fusion proteins respectively. The resulting protein is a transcriptional activator. Defects in FOXO1 are a cause of rhabdomyosarcoma type 2 (RMS2).

Storage

Storage:

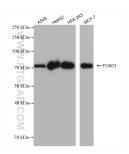
Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

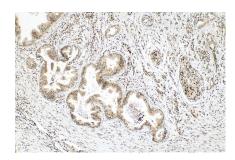
Storage Buffer:

100% PBS pH 7.3

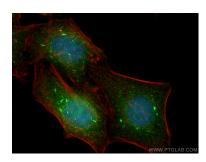
Selected Validation Data



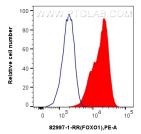
Various lysates were subjected to SDS PAGE followed by western blot with 82997-1-RR (FOXO1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 82997-1-PBS in a different storage buffer formulation.



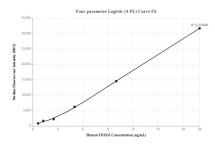
Immunohistochemical analysis of paraffinembedded human pancreas cancer tissue slide using 82997-1-RR (FOXO1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 82997-1-PBS in a different storage buffer formulation.



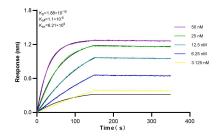
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using FOXO1 antibody (82997-1-RR, Clone: 230183D1) at dilution of 1:400 and MultirAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002), CL594-phalloidin (red). This data was developed using the same antibody clone with 82997-1-PBS in a different storage buffer formulation.



1x10^6 A431 cells were intracellularly stained with 0.25 ug FOXO1 Recombinant antibody (82997-1-RR, Clone:230183D1) and PE-Conjugated Goat Anti-Rabbit IgG (IH+L) (red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011). This data was developed using the same antibody clone with 82997-1-PBS in a different storage buffer



Cytometric bead array standard curve of MP00024-1, FOXO 1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 82997-1-PBS. Detection antibody: 82997-3-PBS. Standard: Ag13296. Range: 0.625-20 ng/mL.



Biolayer interferometry (BLL) kinetic assays of 82997-1-RR against Human FOXO1 were performed. The affinity constant is 0.188 nM.