

For Research Use Only

FOXO1 Recombinant antibody, PBS Only (Capture)

Catalog Number: 82997-1-PBS



Basic Information

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| Catalog Number: 82997-1-PBS | GenBank Accession Number: BC021981 | Purification Method: Protein A purification |
| Size: 100ug , Concentration: 1mg/ml by Nanodrop; | GeneID (NCBI): 2308 | CloneNo.: 230183D1 |
| Source: Rabbit | UNIPROT ID: Q12778 | |
| Isotype: IgG | Full Name: forkhead box O1 | |
| Immunogen Catalog Number: AG13296 | Calculated MW: 655 aa, 70 kDa | |
| | Observed MW: 70-80 kDa | |

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), Cytometric bead array, Indirect ELISA

Species Specificity:
human

Product Information

82997-1-PBS targets FOXO1 as part of a matched antibody pair:

MP00024-1: 82997-1-PBS capture and 82997-3-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

FOXO1, also named as FOXO1A, FKHR and FKHL1, 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. FOXO1 interacts with LRPPRC and SIRT1. In the presence of KIRT1, FOXO1 mediates down-regulation of cyclin D1 and up-regulation 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).

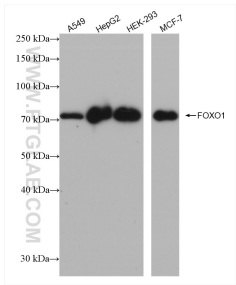
Storage

Storage:
Store at -80°C.
Storage Buffer:
100% PBS pH 7.3

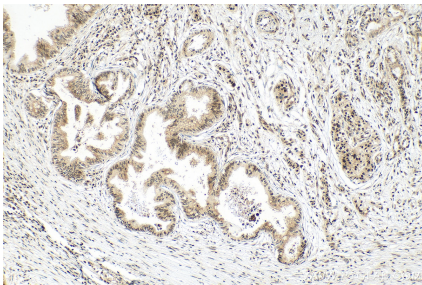
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

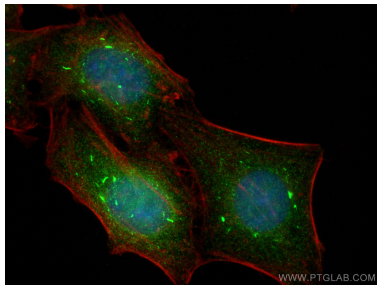
Selected Validation Data



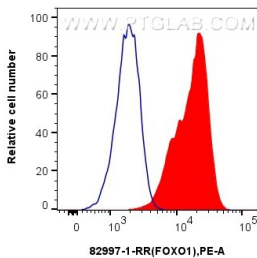
Various lysates were subjected to SDS PAGE followed by western blot with 82997-1-RR (FOXO 1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 82997-1-PBS in a different storage buffer formulation.



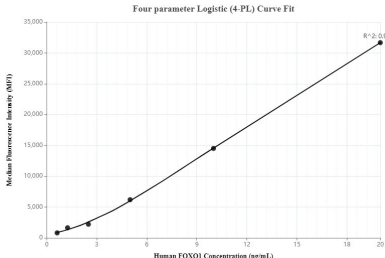
Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 82997-1-RR (FOXO 1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 82997-1-PBS in a different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



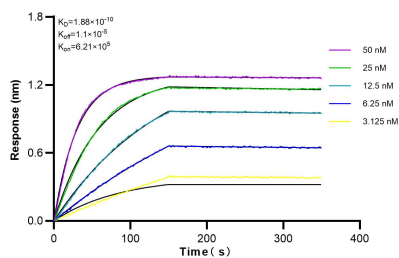
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using FOXO 1 antibody (82997-1-RR, Clone: 230183D1) at dilution of 1:400 and Multi-rAb Coralite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002), CL594-phalloidin (red). This data was developed using the same antibody clone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



1x10⁶ A431 cells were intracellularly stained with 0.25 ug FOXO1 Recombinant antibody (82997-1-RR, Clone:230183D1) and PE-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 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.



Bi-layer interferometry (BLI) kinetic assays of 82997-1-RR against Human FOXO 1 were performed. The affinity constant is 0.188 nM.