

For Research Use Only

FOXP1 Recombinant monoclonal antibody, PBS Only (Detector)

Catalog Number:86937-1-PBS



Basic Information

Catalog Number: 86937-1-PBS	GenBank Accession Number: BC131720	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 27086	CloneNo.: 243153D3
Source: Rabbit	UNIPROT ID: Q9H334	
Isotype: IgG	Full Name: forkhead box P1	
Immunogen Catalog Number: AG17045	Calculated MW: 677 aa, 75 kDa	
	Observed MW: 75-77 kDa, 65-67 kDa	

Applications

Tested Applications:
WB, IF/ICC, Sandwich ELISA, Indirect ELISA, ChIP-qPCR

Species Specificity:
human

Product Information

86937-1-PBS targets FOXP1 as part of a matched antibody pair:

MP02841-1: 86937-2-PBS capture and 86937-1-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 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

FOXP1, also known as Mac-1-regulated forkhead, is a 677 amino acid protein, which forms homodimers and heterodimers with FOXP2 and FOXP4 (PubMed:25027557). Dimerization is required for DNA-binding. FOXP1 has an important function in neuronal development.⁹ Mutations of its gene, FOXP1, located on chromosome 3p14.1,7 can result in the development of autism spectrum disorder, intellectual disability, speech and language deficits as well as motor development delay. FOXP1 is also engaged in lung and esophagus morphogenesis, as well as in B-cell development.^{7,10} The widely researched role of FOXP1 in carcinogenesis is of great importance, although still unclear to some extent. FOXP1 exists some isoforms with MV 75-77 kDa, 65-67 kDa, 12 kDa.

Storage

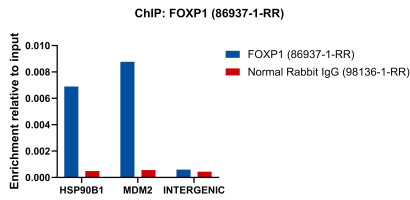
Storage:
Store at -80°C.

Storage Buffer:
PBS only, pH7.3

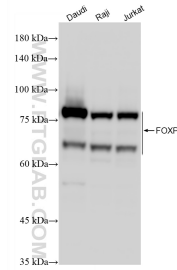
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com
W: ptglab.com

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

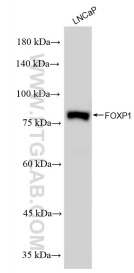
Selected Validation Data



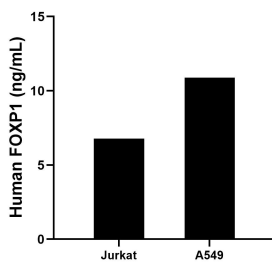
Chromatin was prepared from Raji cells. Cells were fixed with formaldehyde for 10 minutes. The ChIP was performed with 15 µg of cross-linked chromatin, 5 µg of FOXP1 (86937-1-RR) or 5 µg of Normal Rabbit IgG (98136-1-RR), and 20 µl of Protein A Magarose Beads. The immunoprecipitated DNA was quantified by real-time PCR. This data was developed using the same antibody clone with 86937-1-PBS in a different storage buffer formulation.



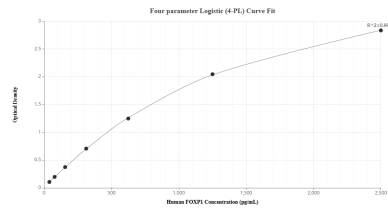
Various lysates were subjected to SDS PAGE followed by western blot with 86937-1-RR (FOXP1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86937-1-PBS in a different storage buffer formulation.



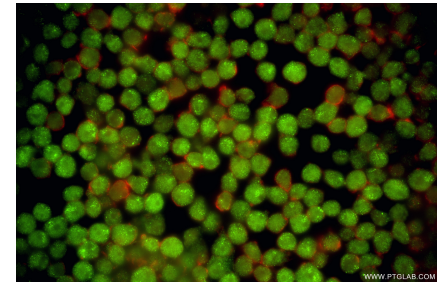
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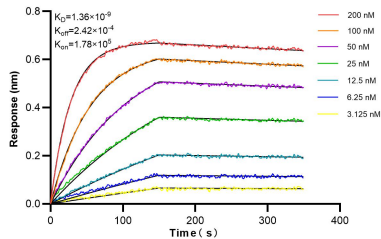
The mean FOXP1 concentration was determined to be 6.79 ng/mL in Jurkat cell extract based on a 1.2 mg/mL extract load and 10.88 ng/mL in A549 cell extract based on a 1.2 mg/mL extract load.



Sandwich ELISA standard curve of MPO2841-1, Human FOXP1 Recombinant Matched Antibody Pair - PBS only. 86937-2-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag17045. 86937-1-PBS was HRP conjugated as the detection antibody. Range: 39.1-2500 pg/mL



Immunofluorescent analysis of (4% PFA) fixed Jurkat cells using FOXP1 antibody (86937-1-RR, Clone: 243153D3) 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 86937-1-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 86937-1-RR against Human FOXP1 were performed. The affinity constant is 1.36 nM.