

Anti-FOXO1A Antibody Picoband™

Catalog Number: PB9195

About FOXO1

Forkhead box protein O1, also known as FKHR or FOXO1A, is a protein that in humans is encoded by the FOXO1 gene. It is mapped to 13q14.11. This gene belongs to the forkhead family of transcription factors which are characterized by a distinct forkhead domain. FOXO1 plays important roles in regulation of gluconeogenesis and glycogenolysis by insulin signaling, and is also central to the decision for a preadipocyte to commit to adipogenesis. This gene is primarily regulated through phosphorylation on multiple residues. Its transcriptional activity is dependent on its phosphorylation state. What's more, FOXO1 may play a role in myogenic growth and differentiation. Translocation of this gene with PAX3 has been associated with alveolar rhabdomyosarcoma.

Overview

Product Name	Anti-FOXO1A Antibody Picoband™
Reactive Species	Human, Rat
Description	Boster Bio Anti-FOXO1A Antibody Picoband™ catalog # PB9195. Tested in WB applications. This antibody reacts with Human, Rat.
Application	WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q12778

Technical Details

Immunogen	E.coli-derived human FOXO1A recombinant protein (Position: N456-G655). Human FOXO1A shares 93% amino acid (aa) sequence identity with both mouse and rat FOXO1A.
Predicted Reactive Species	Human
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized





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antibody and ELISA experts

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.1-0.5ug/ml, Rat, Human



Anti-FOXO1A Antibody Picoband™ (PB9195) Images

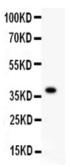


Figure 1. Western blot analysis of FOXO1A using anti-FOXO1A antibody (PB9195).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. Lane 1: recombinant human FOXO1A protein 0.5 ng. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-FOXO1A antigen affinity purified polyclonal antibody (Catalog # PB9195) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for FOXO1A at approximately 39 kDa. The expected band size for FOXO1A is at 39 kDa.

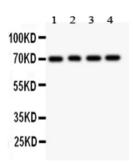


Figure 2. Western blot analysis of FOXO1A using anti-FOXO1A antibody (PB9195).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat lung tissue lysates,

Lane 2: rat brain tissue lysates.

Lane 3: human COLO320 whole cell lysates,

Lane 4: human HepG2 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-FOXO1A antigen affinity purified polyclonal antibody (Catalog # PB9195) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for FOXO1A at approximately 70 kDa. The expected band size for FOXO1A is at 70 kDa.

2 Publications Citing This Product

1. PubMed ID: 10.1016/j.ejphar.2020.173136, Prolonged overnutrition with fructose or fat induces metabolic derangements in rats by disrupting the crosstalk between the hypothalamus and periphery: Possible amelioration with fenofibrate

2. PubMed ID: 24862853, Dong P, Mai Y, Zhang Z, Mi L, Wu G, Chu G, Yang G, Sun S. Acta Biochim Biophys Sin (Shanghai). 2014 Jul;46(7):565-71. Doi: 10.1093/Abbs/Gmu043. Epub 2014 May 26. Mir-15A/B Promote Adipogenesis In Porcine Pre-Adipocyte Via Repressing Foxo1.



Visit bosterbio.com/anti-foxo1a-picoband-trade-antibody-pb9195-boster.html to see all 2 publications.

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