

## 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 Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg NaN <sub>3</sub> .
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

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

## 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](https://bosterbio.com/anti-foxo1a-picoband-trade-antibody-pb9195-boster.html) to see all 2 publications.

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