

## Datasheet for ABIN3042403

# anti-FOXO1 antibody (AA 456-655)

2 Images 1 Publication



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| Overview .                  |  |  |
|-----------------------------|--|--|
| Quantity:                   | 100 μg   |  |
| Target:                     | FOXO1  |  |
| Binding Specificity:        | AA 456-655   |  |
| Reactivity:                 | Rat  |  |
| Host:                       | Rabbit   |  |
| Clonality:                  | Polyclonal   |  |
| Conjugate:                  | This FOXO1 antibody is un-conjugated   |  |
| Application:                | Western Blotting (WB)  |  |
| Product Details             |  |  |
| Purpose:                    | Rabbit IgG polyclonal antibody for Forkhead box protein O1(FOXO1) detection. Tested with WB in Human,Rat.  |  |
| lmmunogen:                  | 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.                     |  |
| Isotype:                    | IgG  |  |
| Cross-Reactivity (Details): | Predicted Cross Reactivity: human  No cross reactivity with other proteins.  Predicted Cross Reactivity: Species predicted to be fit for the product based on sequence similarities. |  |
| Characteristics:            | s: Rabbit IgG polyclonal antibody for Forkhead box protein O1(FOXO1) detection. Tested with W in Human,Rat.  |  |
|                             |  |  |

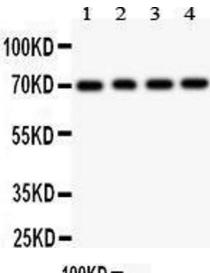
|                   | Gene Name: forkhead box 01  |  |
|-------------------|---|--|
|                   | Protein Name: Forkhead box protein 01   |  |
| Purification:     | Immunogen affinity purified.  |  |
| Target Details    |   |  |
| Target:           | FOX01   |  |
| Alternative Name: | FOXO1 (FOXO1 Products)  |  |
| Background:       | 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.  Synonyms: FKH 1 antibody FKH1 antibody FKHR antibody Forkhead (Drosophila) homolog 1 (rhabdomyosarcoma) antibody Forkhead box O1 antibody Forkhead box protein O1 antibody Forkhead box protein O1A antibody Forkhead in rhabdomyosarcoma |  |
|                   | antibody Forkhead, Drosophila, homolog of, in rhabdomyosarcoma antibody FoxO transcription factor antibody foxo1 antibody FOXO1_HUMAN antibody FOXO1A antibody OTTHUMP00000018301 antibody  |  |
| Gene ID:          | 2308  |  |
| UniProt:          | Q12778  |  |
| Pathways:         | PI3K-Akt Signaling, Cell Division Cycle, Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Carbohydrate Homeostasis, Chromatin Binding, Regulation of Carbohydrate Metabolic Process, CXCR4-mediated Signaling Events, BCR Signaling   |  |

### **Application Details**

Application Notes: WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Rat, Predicted Species: Human, The detection limit for FOXO1A is approximately 0.25 ng/lane under reducing conditions.

# **Application Details**

| • •                |  |  |
|--------------------|--|--|
|                    | Notes: Tested Species: Species with positive results. Predicted Species: Species predicted to            |  |
|                    | fit for the product based on sequence similarities.  |  |
|                    | Other applications have not been tested. Optimal dilutions should be determined by end users.            |  |
| Comment:           | Antibody can be supported by chemiluminescence kit ABIN921124 in WB.                                     |  |
| Restrictions:      | For Research Use only  |  |
| Handling           |  |  |
| Format:            | Lyophilized  |  |
| Reconstitution:    | Add 0.2 mL of distilled water will yield a concentration of 500 μg/mL.                                   |  |
| Concentration:     | 500 μg/mL  |  |
| Buffer:            | Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.                          |  |
| Preservative:      | Sodium azide   |  |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which                            |  |
|                    | should be handled by trained staff only.   |  |
| Handling Advice:   | Avoid repeated freezing and thawing.   |  |
| Storage:           | 4 °C/-20 °C  |  |
| Storage Comment:   | At -20°C for one year. After reconstitution, at 4°C for one month.                                       |  |
|                    | It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing         |  |
|                    | and thawing.   |  |
| Publications       |  |  |
| Product cited in:  | Dong, Mai, Zhang, Mi, Wu, Chu, Yang, Sun: "MiR-15a/b promote adipogenesis in porcine pre-                |  |
|                    | adipocyte via repressing FoxO1." in: <b>Acta biochimica et biophysica Sinica</b> , Vol. 46, Issue 7, pp. |  |
|                    | 565-71, (2014) (PubMed).   |  |



#### **Western Blotting**

Image 1. Anti- FOXO1A antibody, Western blotting All lanes: Anti FOXO1A at 0.5ug/ml Lane 1: Rat Lung Tissue Lysate at 50ug Lane 2: Rat Brain Tissue Lysate at 50ug Lane 3: COLO320 Whole Cell Lysate at 40ug Lane 4: HEPG2 Whole Cell Lysate at 40ug Predicted bind size: 70KD Observed bind size: 70KD

#### Western Blotting

**Image 2.** Anti- FOXO1A antibody, Western blotting All lanes: Anti FOXO1A at 0.5ug/ml WB: Recombinant Human FOXO1A Protein 0.5ng Predicted bind size: 39KD Observed bind size: 39KD

15KD -