

## FOXO3A Rabbit mAb

Catalog No: #48698



Package Size: #48698-1 50ul #48698-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

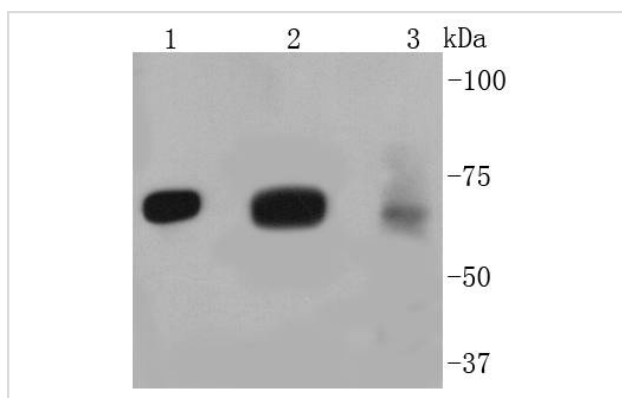
## Description

|                       |   |
|-----------------------|---|
| Product Name          | FOXO3A Rabbit mAb   |
| Host Species          | Recombinant Rabbit  |
| Clonality             | Monoclonal antibody   |
| Clone No.             | SP0054  |
| Purification          | ProA affinity purified  |
| Applications          | WB, ICC/IF  |
| Species Reactivity    | Hu  |
| Immunogen Description | recombinant protein   |
| Other Names           | AF6q21 antibody AF6q21 protein antibody DKFZp781A0677 antibody FKHR2 antibody FKHL 1 antibody FKHL1 antibody FKHL1P2 antibody Forkhead (Drosophila) homolog (rhabdomyosarcoma) like 1 antibody Forkhead box O3 antibody Forkhead box O3A antibody Forkhead box protein O3 antibody Forkhead box protein O3A antibody Forkhead Drosophila homolog of in rhabdomyosarcoma like 1 antibody Forkhead homolog (rhabdomyosarcoma) like 1 antibody Forkhead in rhabdomyosarcoma like 1 antibody Forkhead in rhabdomyosarcoma-like 1 antibody FOX O3A antibody FOXO2 antibody foxo3 antibody FOXO3_HUMAN antibody FOXO3A antibody MGC12739 antibody MGC31925 antibody |
| Accession No.         | Swiss-Prot#:O43524  |
| Calculated MW         | 71 kDa  |
| Formulation           | 1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.  |
| Storage               | Store at -20°C  |

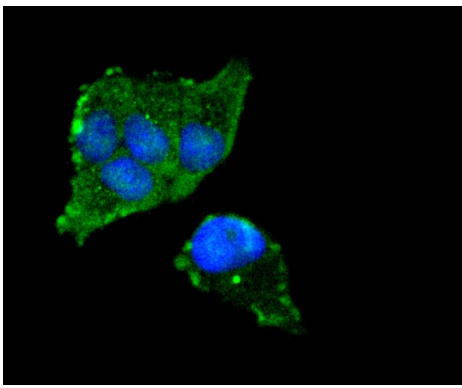
## Application Details

WB: 1:1,000-5,000 ICC: 1:50-1:200

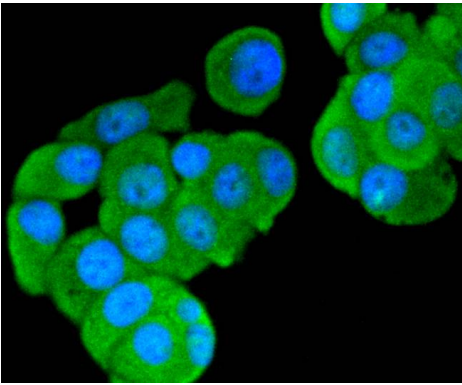
## Images



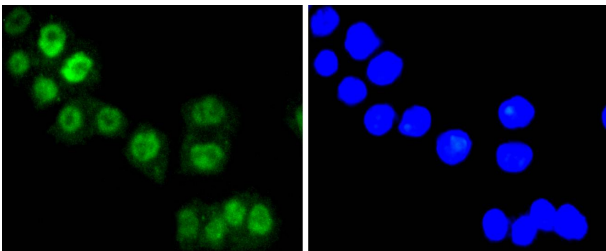
Western blot analysis of FOXO3A on different lysates using anti- FOXO3A antibody at 1/1,000 dilution. Positive control:  
 Lane 1: NIH/3T3      Lane 2: PC-12      Lane 3: MCF-7



ICC staining FOXO3A in HeLa cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining FOXO3A in MCF-7 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining FOXO3A in SW480 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

## Background

FKHRL1 (forkhead in rhabdomyosarcoma-like 1), also known as FOXO3 (forkheadbox O3) or FOXO3A, is a 673 amino acid transcriptional activator that belongs to the FKHR subfamily of forkhead transcription factors. Transcriptional activation of FKHR proteins is regulated by the serine/threonine kinase Akt1, which phosphorylates FKHRL1 at Threonine 32 and Serine 253. Phosphorylation by Akt1 negatively regulates FKHRL1 by promoting its export from the nucleus. Phosphorylated FKHRL1 associates with 14-3-3 proteins and this complex is retained in the cytoplasm. Growth factor withdrawal stimulates FKHRL1 dephosphorylation and nuclear translocation, leading to FKHR-induced gene-specific transcriptional activation. Within the nucleus, dephosphorylated FKHRL1 triggers apoptosis by inducing the expression of genes that are critical for cell death.

## References

1. Liu JY et al. MicroRNA-153 inhibits the proliferation and invasion of human laryngeal squamous cell carcinoma by targeting KLF5. *Exp Ther Med* 11:2503-2508 (2016).
2. Cheung K et al. CD31 signals confer immune privilege to the vascular endothelium. *Proc Natl Acad Sci U S A* 112:E5815-24 (2015).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.