

Anti-FOXO3A Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

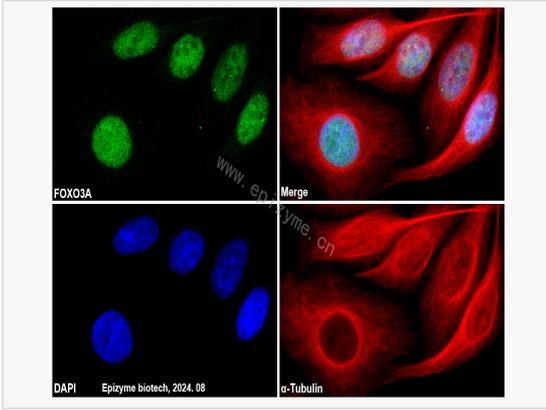
Catalog # R014090

Product Information

Application	ELISA, IF (Cell)/ICC, WB, IHC-P/IF (Tissue-P)
Reactivity	Human
Dilution	WB 1:1,000~1:2,000; IHC-P 1:200; IF 1:100
Host	Rabbit
Clonality	Monoclonal
Clone No.	76K53R97
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human FOXO3A
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-FOXO3A Rabbit mAb [76K53R97] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	FOXO3, FKHL1, FOXO3A, AF6q21, AF6q21 protein, DKFZp781A0677, FKHR2, FKHL1P2, Forkhead (Drosophila) homolog (rhabdomyosarcoma) like 1, Forkhead box O3, Forkhead box O3A, Forkhead box protein O3, Forkhead box protein O3A, Forkhead Drosophila homolog of in rhabdomyosarcoma like 1, Forkhead homolog (rhabdomyosarcoma) like 1, Forkhead in rhabdomyosarcoma like 1, Forkhead in rhabdomyosarcoma-like 1, FOX O3A, FOXO2, FOXO3_HUMAN, FOXO3A,
Calculated MW	Calculated MW: 71 kDa; Observed MW: 90 kDa
Uniprot ID	O43524
Gene ID	2309
Background	Transcriptional activator that recognizes and binds to the DNA sequence 5'-[AG]TAAA[TC]A-3' and regulates different processes, such as apoptosis and autophag. Acts as a positive regulator of autophagy in skeletal muscle: in starved cells, enters the nucleus following dephosphorylation and binds the promoters of autophagy genes, such as GABARAP1L, MAP1LC3B and ATG12, thereby activating their expression, resulting in proteolysis of skeletal muscle proteins. Triggers apoptosis in the absence of survival factors, including neuronal cell death upon oxidative stress. Participates in post-transcriptional regulation of MYC: following phosphorylation by MAPKAPK5, promotes induction of miR-34b and miR-34c expression, 2 post-transcriptional regulators of MYC that bind to the 3'UTR of MYC transcript and prevent its translation (PubMed:21329882). In response to metabolic stress, translocates into the mitochondria where it promotes mtDNA transcription (PubMed:23283301). In response to metabolic stress, translocates into the mitochondria where it promotes mtDNA transcription. Also acts as a key regulator of chondrogenic commitment of skeletal progenitor cells in response to lipid availability: when lipids levels are low, translocates to the nucleus and promotes expression of SOX9, which induces chondrogenic commitment and suppresses fatty acid oxidation



Immunofluorescence - Anti-FOXO3A Rabbit mAb [76K53R97]

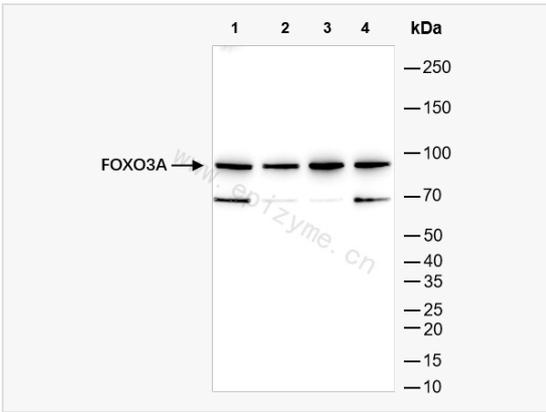
Sample: HeLa cells

The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.

Primary antibodies: R014090 at 1:100 dilution and α -tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution

Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)

Nuclei were stained with DAPI (shown in blue).



Western Blot - Anti-FOXO3A Rabbit mAb [76K53R97]

All lanes: R014090 at 1:1,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates

Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates

Lane 4: A431 (Human epidermoid teratoma cell line) whole cell lysates

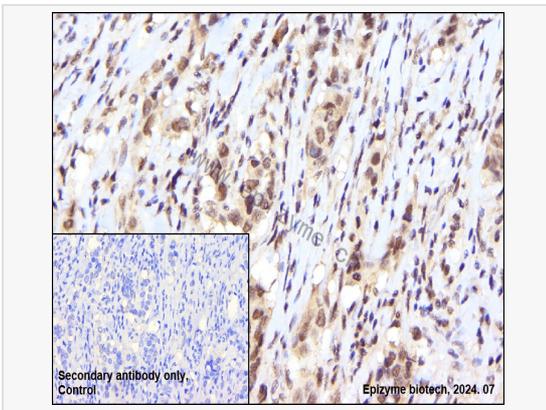
Lysates/proteins at 10 μ g per lane.

Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 71 kDa

Observed band size: 90 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunohistochemistry - Anti-FOXO3A Rabbit mAb [76K53R97]

Sample: Paraformaldehyde-fixed, paraffin embedded human breast cancer tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

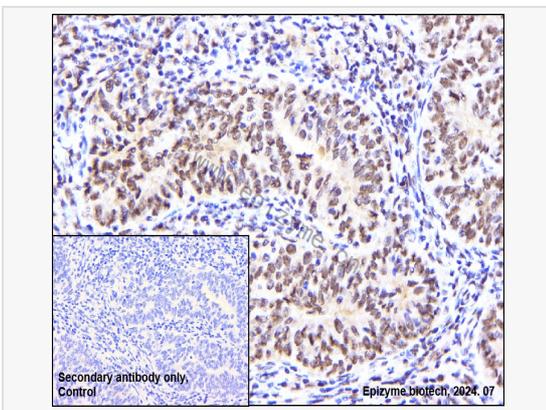
Primary antibody: R014090 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-FOXO3A Rabbit mAb [76K53R97]

Sample: Paraformaldehyde-fixed, paraffin embedded human endometrial carcinoma tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R014090 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.