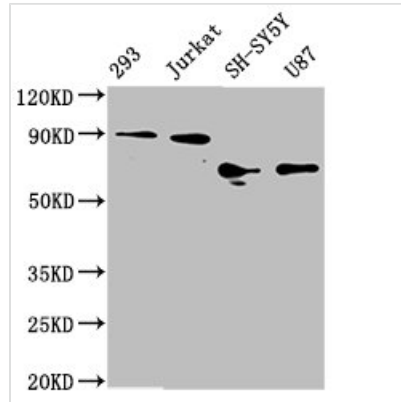




FOXO3 Antibody

Product Code	CSB-RA008836A0HU
Abbreviation	Forkhead box protein O3
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	O43524
Immunogen	A synthesized peptide derived from human FOXO3
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC, IF; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200
Relevance	Transcriptional activator which triggers apoptosis in the absence of survival factors, including neuronal cell death upon oxidative stress (PubMed:10102273, PubMed:16751106). Recognizes and binds to the DNA sequence 5'-[AG]TAAA[TC]A-3' (PubMed:21329882). 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).
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Alias	Forkhead box protein O3, AF6q21 protein, FOXO3
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling
Gene Names	FOXO3
Accession NO.	1E2

Image



Western Blot

Positive WB detected in: 293 whole cell lysate, Jurkat whole cell lysate, SH-SY5Y whole cell lysate, U87 whole cell lysate

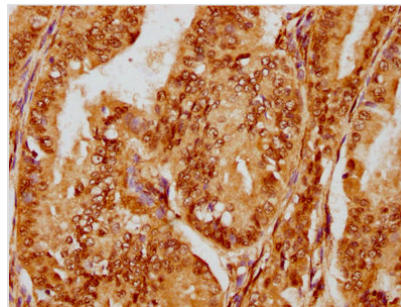
All lanes: FOXO3A antibody at 1.8µg/ml

Secondary

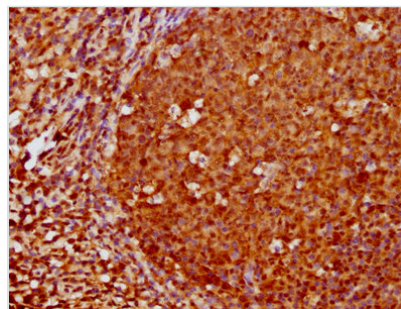
Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 72, 49 KDa

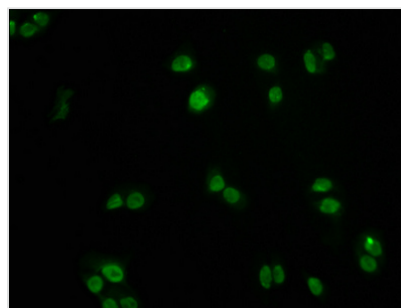
Observed band size: 72-90 KDa



IHC image of CSB-RA008836A0HU diluted at 1:180 and staining in paraffin-embedded human endometrial cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



IHC image of CSB-RA008836A0HU diluted at 1:180 and staining in paraffin-embedded human tonsil tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Immunofluorescence staining of PC3 cells with CSB-RA008836A0HU at 1:60, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Description

CUSABIO's product CSB-RA008836A0HU is a FOXO3 recombinant monoclonal antibody. Clone the gene fragment encoding human FOXO3 protein into the expression vector and subsequently transfect clones into the cell line for in vitro expression. This FOXO3 recombinant antibody can detect the endogenous content of the human FOXO3 protein. It is purified by the affinity chromatography method. And it has passed through quality testing in ELISA, WB, IHC, and IF applications.



As a central transcription factor, FOXO3 mediates multiple physiological and pathological processes by inducing transcription of target genes involved in apoptosis, proliferation, cell cycle progression, survival, and DNA damage. FOXO3 has been consistently linked to longevity in vivo models. It also participates in regulating the autophagy process in muscle and in cancer cells. The deregulation of FOXO3 expression or activity can result in various diseases, particularly cancer.