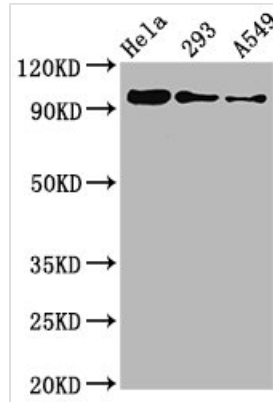




# Phospho-FOXO3 (S253) Recombinant Monoclonal Antibody

<b>Product Code</b>	CSB-RA008836A253phHU
<b>Abbreviation</b>	Forkhead box protein O3
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	O43524
<b>Immunogen</b>	A synthesized peptide derived from Human Phospho-FOXO3 (S253)
<b>Species Reactivity</b>	Human
<b>Tested Applications</b>	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
<b>Relevance</b>	Transcriptional activator which triggers apoptosis in the absence of survival factors, including neuronal cell death upon oxidative stress. Recognizes and binds to the DNA sequence 5'-[AG]TAAA[TC]A-3'. 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.
<b>Form</b>	Liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
<b>Purification Method</b>	Affinity-chromatography
<b>Isotype</b>	Rabbit IgG
<b>Clonality</b>	Monoclonal
<b>Alias</b>	Forkhead box protein O3, AF6q21 protein, FOXO3
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Research Area</b>	Epigenetics and Nuclear Signaling
<b>Gene Names</b>	FOXO3
<b>Clone No.</b>	1E1
<b>Image</b>	



#### Western Blot

Positive WB detected in HeLa whole cell lysate, 293 whole cell lysate, A549 whole cell lysate

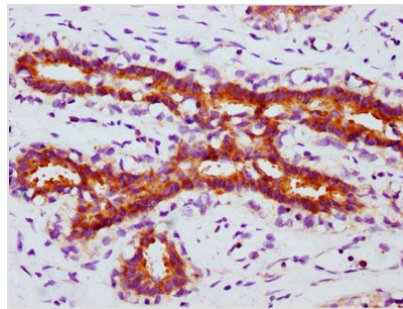
All lanes Phospho-FOXO3 antibody at 0.96μg/ml

Secondary

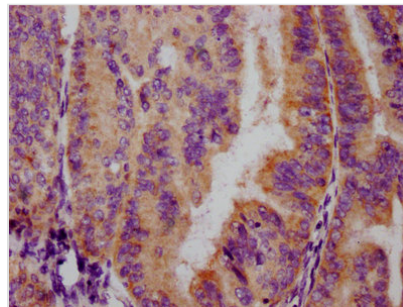
Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 97 KDa

Observed band size: 97 KDa



IHC image of CSB-RA008836A253phHU diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica Bond<sup>TM</sup> 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° overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



IHC image of CSB-RA008836A253phHU diluted at 1:100 and staining in paraffin-embedded human endometrial cancer performed on a Leica Bond<sup>TM</sup> 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° overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.

## Description

The synthesized DNA sequence corresponding to the phospho-FOXO3 (S253) monoclonal antibody was cloned into the plasmid and then transfected into the cell line for expression. The product was purified through the affinity-chromatography method and obtained the phospho-FOXO3 (S253) recombinant monoclonal antibody. This FOXO3-pS253 recombinant antibody is a rabbit IgG and has been tested in scientific applications, including ELISA, WB, and IHC. It can be used to detect the human FOXO3 phosphorylated at Ser253 residue.

FOXO3 is a transcription factor that controls a variety of physiological processes such as cell cycle arrest, apoptosis, oxidative stress response, and energy consumption. Various post-translational modifications, such as acetylation, ubiquitination, and phosphorylation, regulate FOXO3. AKT phosphorylates FOXO3 at T32 and S253, forming 14-3-3 binding sites, which modulates FOXO3 transcriptional activity and localization.