

Product datasheet for **TA307540**

FOXO3 Rabbit Monoclonal Antibody [Clone ID: EPR1950]

Product data:

Product Type:	Primary Antibodies
Clone Name:	EPR1950
Applications:	IF, WB
Recommended Dilution:	WB: 1:1000 - 1:10000; ICC/IF: 1:50 - 1:100
Reactivity:	Mouse, Rat, Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	A synthetic peptide corresponding to residues in the C-terminus of human FOXO3a was used as an immunogen.
Formulation:	PBS 49%, Sodium azide 0.01%, Glycerol 50%, BSA 0.05%
Concentration:	lot specific
Purification:	Tissue culture supernatant
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	71 kDa
Gene Name:	forkhead box O3
Database Link:	NP_001446 Entrez Gene 56484 Mouse Entrez Gene 294515 Rat Entrez Gene 2309 Human O43524



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Background:

Forkhead box O-class (FOXO) transcription factors are mammalian homologue of DAF-16, a known lifespan regulator of *Caenorhabditis elegans*. FOXO transcription factors, such as FOXO1, FOXO3a, and FOXO4, have been linked to the regulation of cell cycle, apoptosis, DNA repair, oxidative stress, and metabolism (1). FOXO proteins are proposed to be dual regulated by Akt-mediated phosphorylation and Skp2-mediated ubiquitination, which are usually initiated by growth factors and cytokines. FOXO proteins are also activated by stress, which induces gene expression that contributes to cell cycle arrest, implicating FOXO proteins as tumor suppressors (2). Specifically, FOXO3a (FKHR-L1) is a transcriptional activator for apoptosis in the absence of survival factors, such as in neural cell death triggered by oxidative stress. In the presence of survival factors like IGF-1, AKT1/PKB phosphorylates on Thr-32 and Ser-253. FOXO3a is inactivated when phosphorylated by AKT1 on Thr-32 and Ser-253 (3).

Synonyms:

AF6q21; FKHL1; FKHL1P2; FOXO2; FOXO3A

Note:

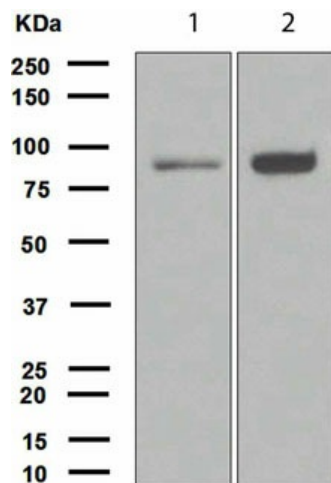
Is unsuitable for Flow Cyt, IHC-P or IP.

Protein Families:

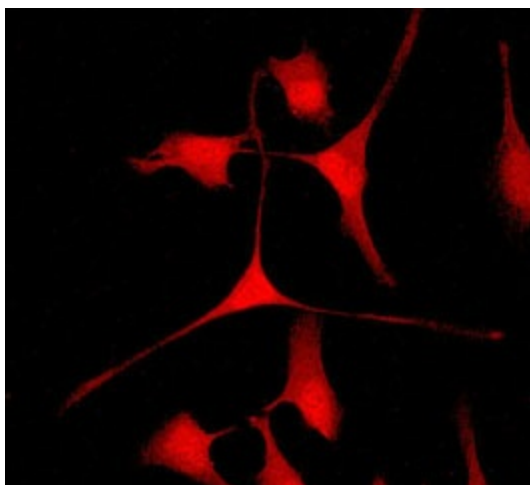
Druggable Genome, Transcription Factors

Protein Pathways:

Chemokine signaling pathway, Endometrial cancer, Neurotrophin signaling pathway, Non-small cell lung cancer

Product images:

Western blot - FOXO3A antibody [EPR1950]; All lanes : Anti-FOXO3A antibody [EPR1950] at 1/1000 dilution. Lane 1 : MCF7 cell lysate. Lane 2 : SH-SY5Y cell lysate. Lysates/proteins at 10 ug per lane. Predicted band size : 71 kDa.



Immunocytochemistry/ Immunofluorescence - FOXO3A antibody [EPR1950]; Immunofluorescent staining of HeLa cells using TA307540 at a dilution of 1/50.