

Product datasheet for AP06429PU-N

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

FOXO1 Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: IHC

Recommended Dilution: Western blot: 1/500-1/1000.

Immunohistochemistry on paraffin sections: 1/50-1/200.

Reactivity: Human, Mouse, Rat

Host: Rabbit

Clonality: Polyclonal

Immunogen: Synthetic peptide, corresponding to the RPRSCTWPL of Human FoxO1.

Specificity: This antibody detects endogenous levels of FOXO1/3/4-pan protein.

(region surrounding Pro18/26)

Formulation: Phosphate buffered saline (PBS), pH 7.2.

State: Aff - Purified

State: Liquid purified lg fraction Preservative: 0.05% sodium azide

Concentration: 1.0 mg/ml

Purification: Affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-

PAGE)

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: ~ 70 to 82 kDa **Gene Name:** forkhead box O1

Database Link: Entrez Gene 2308 Human

Q12778





Background:

FOXO1 + FOX3 + FOX4 belong to the forkhead family of transcription factors.

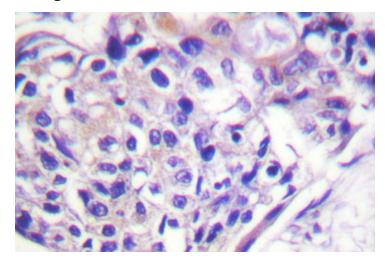
FOXO1 (FKHR or ForkHead in Rhabdomyosarcoma) is a 70 kDa protein. Recent studies have shown that this protein can act as either a coactivator or a corepressor of nuclear receptor activity. This action is mediated through the LXXLL motif found in the C terminus of the FOXO1A protein. The specific function of the gene has not yet been determined.

FOX3 probably functions as a trigger for apoptosis through expression of genes necessary for cell death. Translocation of the FOXO3 gene with the MLL gene is associated with secondary acute leukemia. FOX4 is a forkhead transcription factor involved in the regulation of the insulin signaling pathway. It binds to insulin-response elements (IREs) and can activate transcription of IGFBP1.

FOXO4 down-regulates expression of HIF1A and suppresses hypoxia-induced transcriptional activation of HIF1A-modulated genes. It is also involved in negative regulation of the cell cycle.

Synonyms: FOXO1A, FOXO3A, FOXO4A

Product images:



Immunohistochemistry (IHC) analyzes of FOXO1/3/4-pan antibody in paraffin-embedded human breast carcinoma tissue.