

Product datasheet for **AP20887PU-M**

FOXO1 pSer256 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	Western blot: 1/500 - 1/1000. Immunohistochemistry on paraffin sections 1/50 - 1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of p-FKHR/FOXO1A protein only when phosphorylated at Ser256 .
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.05% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity chromatography (> 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:	<u>Entrez Gene 56458 Mouse</u> <u>Entrez Gene 84482 Rat</u> <u>Entrez Gene 2308 Human</u> <u>Q12778</u>



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Background:

The transcription factor forkhead in rhabdomyosarcoma (FKHR), which is inhibited by insulin and IGF-1, enhances transcription. FKHR has been implicated in alveolar rhabdomyosarcoma, a soft tissue tumor wherein a chromosomal translocation [t(2;12)(q35;q14)] occurs between the FKHR and PAX3 genes, resulting in a novel chimeric protein with abnormal levels of expression. FKHR becomes phosphorylated at Ser 319, Ser 256 and Thr 256 by protein kinase B (PKB) in a phosphoinositide 3 (PI 3)-kinase/Akt-dependent pathway, resulting in the inactivation and subsequent nuclear exit of FKHR. In addition, FKHR becomes phosphorylated at Ser 329, also resulting in decreased FKHR activity and diminished nuclear FKHR concentration. However, phosphorylation of FKHR at Ser 329 is not mediated by a PI 3-kinasedependent pathway, but by an alternate mechanism. Dualspecificity tyrosine-phosphorylated and regulated kinase 1A (DYRK1A), which co-localizes to the same region of the nucleus as FKHR, specifically phosphorylates FKHR at Ser 329 in rabbit skeletal muscle.

Synonyms:

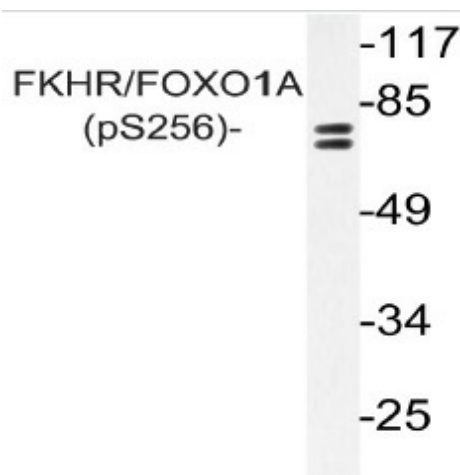
Forkhead Box Protein O1, FOXO1, FKHR

Protein Families:

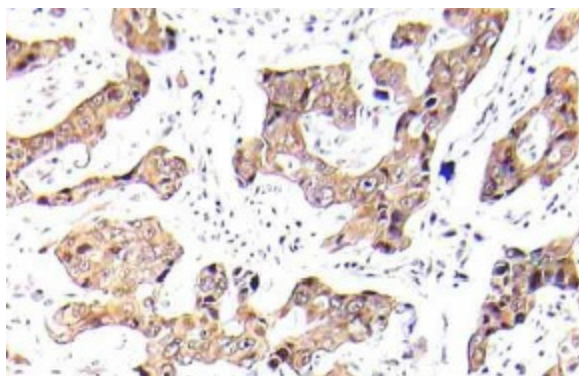
Druggable Genome, Transcription Factors

Protein Pathways:

Insulin signaling pathway, Pathways in cancer, Prostate cancer

Product images:


Western blot (WB) analysis of p-FKHR/FOXO1A antibody (Cat.-No.: [AP20887PU-N]) in extracts from NIH/3T3 cells



Immunohistochemistry (IHC) analyzes of p-FKHR/FOXO1A antibody (Cat.-No.: [AP20887PU-N]) in paraffin-embedded human breast carcinoma tissue.