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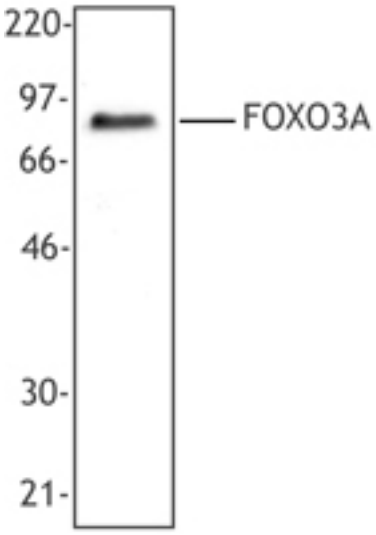
Product Data Sheet

Purified anti-FOXO3A (FKHRL1)

Catalog # / Size: 629801 / 50 µl
Clone: Poly6298
Isotype: Rabbit IgG
Immunogen: Synthetic peptide
Reactivity: Human
Preparation: The antibody was purified by antigen-affinity chromatography.
Formulation: This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 50% glycerol.
Storage: Upon receipt, store frozen at -20° C.



Jurkat cell extract was resolved by electrophoresis, transferred to nitrocellulose, and probed with rabbit polyclonal antibody against FOXO3A. Proteins were visualized using a donkey anti-rabbit secondary conjugated to HRP and a chemiluminescence detection system.

Applications:

Applications: WB
Recommended Usage: Each lot of this antibody is quality control tested by Western blotting. Western blotting, suggested working dilution(s): Use 10 µl per 5 ml antibody dilution buffer for each mini-gel. It is recommended that the reagent be titrated for optimal performance for each application.

Description: This polyclonal antibody recognizes human FOXO3A also known as forkhead box 03A, forkhead in rhabdomysacoma-like 1, and FKHRL1. FOXO3A is a member of the forkhead transcription factor family, containing a single forkhead domain, with a predicted molecular weight of approximately 71 kD. The FOXO3A protein is located in the cytoplasm when complexed to 14-3-3 protein; and in the nucleus when acting as a transcription factor for cell death genes. FOXO3A is widely expressed in the heart, brain, lung, liver, muscle, kidney, spleen, thymus, prostate, ovary, and small intestine. The FOXO3A protein triggers apoptosis by inducing cell death-specific genes. When survival factors are present, AKT1 phosphorylates FOXO3A leading to its association with 14-3-3 proteins and retention in the cytoplasm. Withdrawal of survival factors leads to dephosphorylation of FOXO3A and nuclear translocation which induces cell death. Overexpression of FOXO3A can cause growth suppression; while inhibition of FOXO3A has been reported to promote tumorigenesis under some conditions. FOXO3A acts at the G2/M checkpoint to activate DNA repair through the direct activation of proteins such as GADD45A. FOXO3A has also been shown to regulate erythroid differentiation. FOXO3A is modified at multiple phosphorylation sites (T32, S253, S315) and has been shown to interact with SMAD4, SMAD3, SMAD2, AKT1, 14-3-3 zeta, other proteins. This antibody has been shown to be useful for Western blotting.

Antigen References:
1. Bakker WJ, *et al.* 2004. *J. Cell Biol.* 164:175.
2. Brunet A, *et al.* 1999. *Cell* 96:857.
3. Dijkers PF, *et al.* 2002. *J. Cell Biol.* 156:531.
4. Hu MCT, *et al.* 2004. *Cell* 117:225.
5. Tran H, *et al.* 2002 *Science* 296:530.

Related Products:

Product	Clone	Application
HRP Donkey anti-rabbit IgG (minimal x-reactivity)	Poly4064	ELISA, IHC, WB

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