

KD-Validated Anti-Forkhead box O4 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1686

Specification

Gene Name

Immunogen

KD-Validated Anti-Forkhead box O4 Rabbit Monoclonal Antibody - Product Information

Application WB, FC, ICC

Primary Accession P98177

Reactivity Rat, Human, Mouse Clonality **Monoclonal** Isotype Rabbit IgG

Calculated MW Predicted, 54 kDa, observed, 23,65 kDa

KDa FOXO4

Aliases FOXO4; Forkhead Box O4; AFX1; MLLT7;

> Myeloid/Lymphoid Or Mixed-Lineage Leukemia (Trithorax Homolog, Drosophila);

Translocated To. 7 2 3: Fork Head Domain Transcription Factor AFX1; Forkhead Box Protein O4; AFX; Myeloid/Lymphoid Or Mixed-Lineage Leukemia (Trithorax

(Drosophila) Homolog); Translocated To, 7 A synthesized peptide derived from human

FoxO4

KD-Validated Anti-Forkhead box O4 Rabbit Monoclonal Antibody - Additional Information

Gene ID 4303

Other Names

Forkhead box protein O4, Fork head domain transcription factor AFX1, FOXO4, AFX, AFX1, MLLT7

KD-Validated Anti-Forkhead box O4 Rabbit Monoclonal Antibody - Protein Information

Name FOXO4

Synonyms AFX, AFX1, MLLT7

Function

Transcription factor involved in the regulation of the insulin signaling pathway. Binds to insulin-response elements (IREs) and can activate transcription of IGFBP1. Down-regulates expression of HIF1A and suppresses hypoxia-induced transcriptional activation of HIF1A-modulated genes. Also involved in negative regulation of the cell cycle. Involved in increased proteasome activity in embryonic stem cells (ESCs) by activating expression of PSMD11 in ESCs, leading to enhanced assembly of the 26S proteasome, followed by higher proteasome activity.

Cellular Location

Cytoplasm. Nucleus. Note=When phosphorylated, translocated from nucleus to cytoplasm. Dephosphorylation triggers nuclear translocation. Monoubiquitination increases nuclear



localization. When deubiquitinated, translocated from nucleus to cytoplasm

Tissue Location

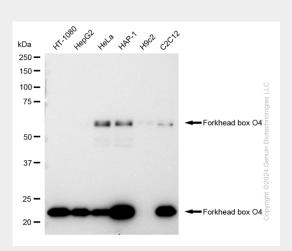
Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Isoform zeta is most abundant in the liver, kidney, and pancreas

KD-Validated Anti-Forkhead box O4 Rabbit Monoclonal Antibody - Protocols

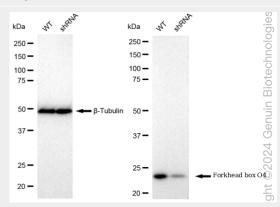
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Forkhead box O4 Rabbit Monoclonal Antibody - Images



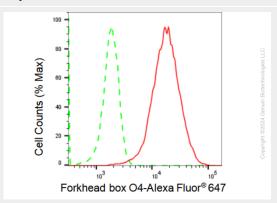
Western blotting analysis using anti-Forkhead box O4 antibody (Cat#AGI1686). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Forkhead box O4 antibody (Cat#AGI1686, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



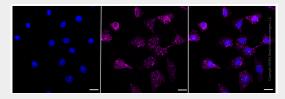
Western blotting analysis using anti-Forkhead box O4 antibody (Cat#AGI1686). Forkhead box O4



expression in wild type (WT) and Forkhead box O4 shRNA knockdown (KD) 293T cells with 30 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-Forkhead box O4 antibody (Cat#AGI1686, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Forkhead box O4 expression in HeLa cells using Forkhead box O4 antibody (Cat#AGI1686, 1:2,000). Green, isotype control; red, Forkhead box O4.



Immunocytochemical staining of HeLa cells with Forkhead box O4 antibody (Cat#AGI1686, 1:1,000). Nuclei were stained blue with DAPI; Forkhead box O4 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: $20~\mu m$.