

FOXD3 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1493a**Specification**

FOXD3 Antibody - Product Information

Application	WB, IHC
Primary Accession	O9UJU5
Reactivity	Human, Mouse, Monkey
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	50kDa KDa

Description

FoxD3 is a member of the Forkhead Box family and is characterized by a winged-helix DNA-binding structure and the important role it plays in embryonic development. This transcriptional regulator is required for the maintenance of pluripotency in the pre-implantation and peri-implantation stages of mouse embryonic development and is also required for trophoblast formation. FoxD3 is required for the maintenance of the mammalian neural crest; FoxD3(-/-) mouse embryos fail around the time of implantation with loss of neural crest-derived structures. FoxD3 also forms a regulatory network with Oct-4 and NANOG to maintain the pluripotency of ES cells. Promotes development of neural crest cells from neural tube progenitors. Restricts neural progenitor cells to the neural crest lineage while suppressing interneuron differentiation. Required for maintenance of pluripotent cells in the pre-implantation and peri-implantation stages of embryogenesis. Tissue specificity: Expressed in chronic myeloid leukemia, Jurkat T-cell leukemia and teratocarcinoma cell lines, but not in any other cell lines or normal tissues examined.

Immunogen

Purified recombinant fragment of human FOXD3 expressed in E. Coli.

Formulation

Ascitic fluid containing 0.03% sodium azide.

FOXD3 Antibody - Additional Information

Gene ID 27022

Other Names

Forkhead box protein D3, HNF3/FH transcription factor genesis, FOXD3, HFH2

Dilution

WB~~1/500 - 1/2000

IHC~~1/200 - 1/1000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

FOXD3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

FOXD3 Antibody - Protein Information

Name FOXD3

Synonyms HFH2

Function

Binds to the consensus sequence 5'-A[AT]T[AG]TTTGTTT-3' and acts as a transcriptional repressor (PubMed:11891324). Also acts as a transcriptional activator (PubMed:11891324). Negatively regulates transcription of transcriptional repressor RHIT/ZNF205 (PubMed:22306510). Promotes development of neural crest cells from neural tube progenitors (PubMed:11891324). Restricts neural progenitor cells to the neural crest lineage while suppressing interneuron differentiation (PubMed:11891324). Required for maintenance of pluripotent cells in the pre-implantation and peri-implantation stages of embryogenesis (PubMed:11891324).

Cellular Location

Nucleus.

Tissue Location

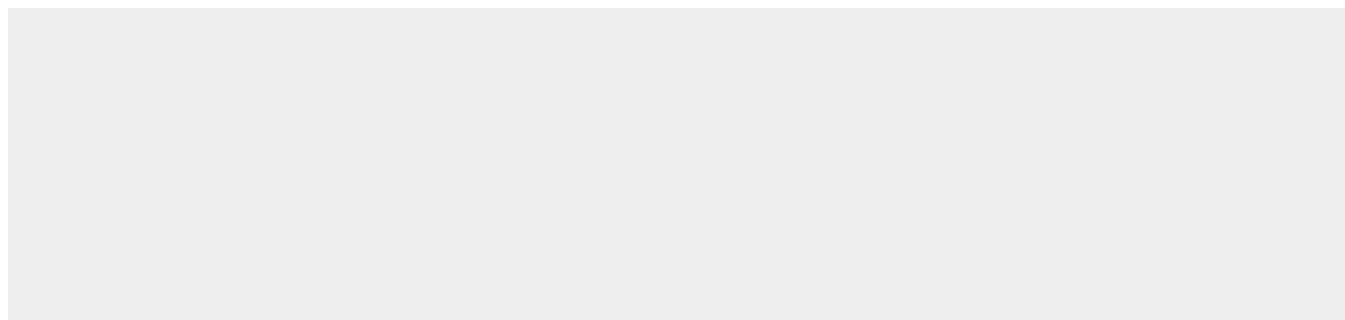
Expressed in chronic myeloid leukemia, Jurkat T- cell leukemia and teratocarcinoma cell lines, but not in any other cell lines or normal tissues examined.

FOXD3 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 Cytometry](#)
- [Cell Culture](#)

FOXD3 Antibody - Images



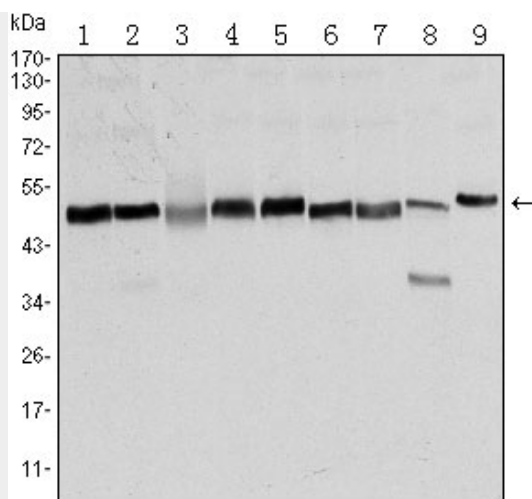


Figure 1: Western blot analysis using FOXD3 mouse mAb against NTERA-2 (1), HUVE-12 (2), HEK293 (3), Hela (4), Jurkat (5), K562 (6), RAW264.7 (7), NIH/3T3 (8), and COS7 (9) cell lysate.

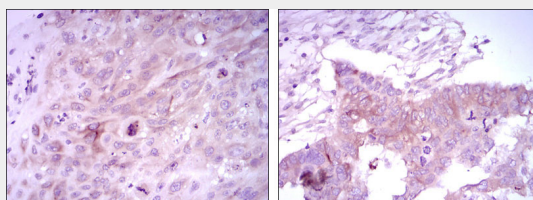


Figure 2: Immunohistochemical analysis of paraffin-embedded lung cancer tissues (left) and ovarian cancer tissues (right) using FOXD3 mouse mAb with DAB staining.

FOXD3 Antibody - References

1. J Neuroimmune Pharmacol. 2009 Mar;4(1):103-15.
2. Nature. 2006 May 18;441(7091):315-21.