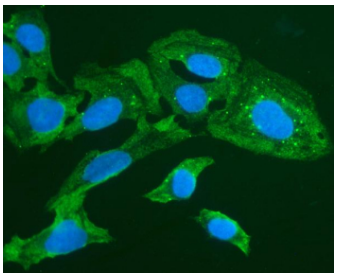
FOXI1 Antibody / Forkhead Transcription Factor Antibody (FY13299)

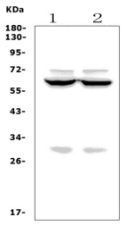
Catalog No.	Formulation	Size
FY13299	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

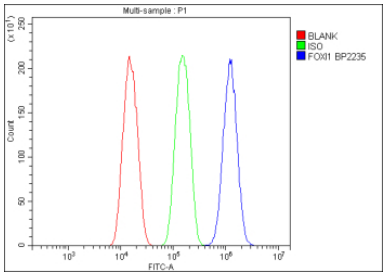
Availability	1-2 days
Species Reactivity	Human, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.01 mg NaN3.
UniProt	Q12951
Applications	Western Blot : 0.25-0.5ug/ml Immunocytochemistry : 5ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells ELISA : 0.1-0.5ug/ml
Limitations	This FOXI1 Antibody / Forkhead Transcription Factor Antibody is available for research use only.



FOXL1 Antibody U2OS IF. Immunofluorescence analysis of U2OS cells stained with FOXI1 Antibody / Forkhead Transcription Factor Antibody (green). Forkhead box protein I1 / FOXI1 staining is observed throughout the cytoplasm with additional perinuclear signal in human U2OS cells, consistent with the dynamic intracellular distribution reported for FOX family transcription-associated regulatory proteins. Cells were subjected to enzyme-mediated antigen retrieval followed by incubation with rabbit anti-FOXI1 antibody and DyLight 488-conjugated secondary antibody. Nuclei are counterstained with DAPI (blue).



FOXI1 Antibody Tissue WB. Western blot analysis of rat kidney tissue lysate (Lane 1) and monkey COS-7 cell lysate (Lane 2) using FOXI1 Antibody / Forkhead Transcription Factor Antibody. A predominant band is detected at approximately 60 kDa in both samples, migrating above the predicted molecular weight of Forkhead box protein I1 / FOXI1 (~41 kDa), potentially reflecting post-translationally modified or alternatively processed protein species. Additional weaker bands are observed near approximately 70 kDa and 30 kDa, which may represent modified, truncated, or lower abundance FOXI1-associated species. The expression pattern is consistent with the broad regulatory role of this forkhead transcription factor in tissue-associated gene expression and developmental signaling pathways.



FOXI1 Antibody FACS. Flow cytometry analysis of fixed and permeabilized cells stained with FOXI1 Antibody / Forkhead Transcription Factor Antibody (blue histogram). Isotype control is shown in green and unstained blank control in red. The distinct rightward fluorescence shift supports detection of endogenous Forkhead box protein I1 / FOXI1 expression, consistent with the intracellular distribution expected for a forkhead family transcription-associated regulatory protein. Cells were fixed with paraformaldehyde, permeabilized prior to intracellular staining, and detected using DyLight 488-conjugated goat anti-rabbit IgG secondary antibody.

Description

Forkhead box protein I1 (FOXI1) is a member of the forkhead box family of transcription factors involved in epithelial differentiation, developmental signaling, and regulation of ion transport-associated gene expression pathways. FOXI1 Antibody / Forkhead Transcription Factor Antibody is suitable for investigations involving epithelial regulatory proteins, developmental transcription factors, and signaling-associated gene expression control mechanisms. FOXI1 belongs to the FOX superfamily of DNA-binding transcriptional regulators characterized by a conserved forkhead domain that coordinates lineage-specific differentiation and tissue-associated transcriptional programs.

FOXI1 antibody, also referred to as Forkhead box I1 antibody, Forkhead transcription factor antibody, HFH-3 antibody, and FKHL10 antibody in the literature, recognizes a transcription-associated regulatory protein strongly linked to epithelial ion transport regulation and developmental tissue specification. FOXI1 expression is enriched within specialized epithelial populations including renal intercalated cells and inner ear epithelial structures, where it contributes to regulation of proton transport and ion homeostasis-associated genes. FOXI1 has been reported to regulate expression of proton pump subunits, ion channels, and epithelial transport-associated proteins required for maintenance of specialized epithelial physiology.

Members of the forkhead transcription factor family regulate diverse biological processes including embryogenesis, organ development, differentiation, metabolism, and adaptive signaling responses. FOXI1 contributes to epithelial maturation pathways and developmental signaling programs associated with acid-base balance, epithelial functional identity, and ion transport regulation. Experimental studies have demonstrated that FOXI1 participates in transcriptional control of pathways required for epithelial specialization and maintenance of tightly regulated transport environments in kidney and inner ear tissues.

Dysregulation of FOXI1-associated transcriptional programs has been linked to developmental abnormalities involving epithelial and sensory systems. Because FOXI1 functions as a lineage-associated transcription factor within ion-transporting epithelial populations, this target is useful for studies examining epithelial differentiation, tissue patterning, and developmental signaling pathways associated with specialized transport functions. FOXI1 has additionally been investigated in relation to epithelial homeostasis mechanisms requiring coordinated transcriptional regulation of transport-associated genes.

Western blot, immunofluorescence, and flow cytometry analyses support detection of endogenous FOXI1 expression across multiple research applications. Immunofluorescence analysis demonstrates strong nuclear-associated staining

with additional cytoplasmic signal, consistent with the intracellular localization expected for a forkhead family transcription-associated regulatory protein. The combination of WB, IF, and FACS application data supports use of this rabbit polyclonal antibody for investigations involving epithelial differentiation proteins, developmental signaling pathways, and transcription-associated ion transport regulation.

An antibody targeting FOXI1 can therefore support studies involving forkhead transcription factor biology, epithelial differentiation programs, developmental tissue specification, ion transport-associated gene regulation, and transcriptional control mechanisms involved in epithelial homeostasis.

Explore our FOXI1 Antibody / Forkhead Box Transcription Factor Marker page for additional validation data including HuProt microarray specificity analysis, immunohistochemistry, immunofluorescence, and flow cytometry characterization of FOXI1 expression.

Application Notes

Optimal dilution of the FOXI1 Antibody / Forkhead Transcription Factor Antibody should be determined by the researcher.

Immunogen

E.coli-derived human FOXI1 recombinant protein (Position: M1-V378) was used as the immunogen for the FOXI1 antibody.

Storage

After reconstitution, the FOXI1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

FOXI1 antibody, Forkhead box I1 antibody, Forkhead transcription factor antibody, HFH-3 antibody, FKHL10 antibody

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