

DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human FoxJ1 in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human FoxJ1 Lys306-Leu421 Accession # Q92949
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS
Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below
Simple Western	10 µg/mL	See Below

DATA

Western Blot

Detection of Human FoxJ1 by Western Blot. Western blot shows lysates of Capan-1 human pancreatic adenocarcinoma cell line and T47D human breast cancer cell line. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human FoxJ1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3619) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for FoxJ1 at approximately 55 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry

FoxJ1 in HEK293 Human Cell Line. FoxJ1 was detected in immersion fixed HEK293 human embryonic kidney cell line using Goat Anti-Human FoxJ1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3619) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red, upper panel; Catalog # NL001) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei and cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunocytochemistry

FoxJ1 in Early Proximal Lung Progenitors. FoxJ1 was detected in immersion fixed BGO1V human embryonic stem cells differentiated to early proximal lung progenitors using Goat Anti-Human FoxJ1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3619) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red, Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to nuclei. View our protocol for [Fluorescent ICC Staining of Stem Cells on Coverslips](#).

Simple Western

Detection of Human FoxJ1 by Simple Western™. Simple Western lane view shows lysates of Capan-1 human pancreatic adenocarcinoma cell line and T47D human breast cancer cell line, loaded at 0.2 mg/mL. A specific band was detected for FoxJ1 at approximately 58 kDa (as indicated) using 10 µg/mL of Goat Anti-Human FoxJ1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3619) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system. Non-specific interaction with the 230 kDa Simple Western standard may be seen with this antibody.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

FoxJ1 (Forkhead box protein J1; also HFH4) is a 55-65 kDa, class 1 member of the HNF-3/forkhead gene family of transcription factors. Its observed MW is higher than its predicted MW (45 kDa), suggesting anomalous migration on SDS-PAGE. FoxJ1 promotes the expression of cilia in respiratory, oviduct and choroid plexus epithelium, and maintains T cell tolerance to self-antigens. Human FoxJ1 is 421 amino acids (aa) in length, and contains one forkhead DNA binding domain (aa's 120-210). The presence of basic residues in the forkhead domain makes FoxJ1 a class 1 Fox protein. There is potential splice variant that contains a 25 aa substitution for aa 262-287. Over aa 306-421, human FoxJ1 shares 88% aa with mouse FoxJ1.