

DESCRIPTION

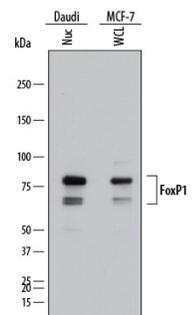
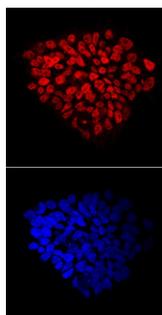
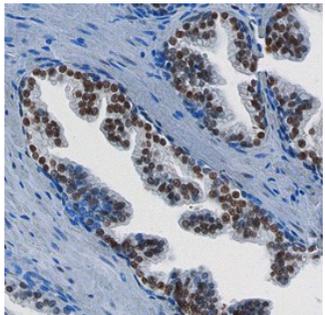
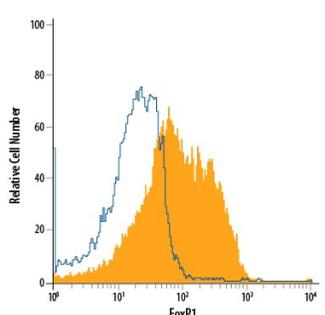
Species Reactivity	Human
Specificity	Detects human FoxP1 in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 837016
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human FoxP1 Lys548-Glu677 Accession # Q9H334
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

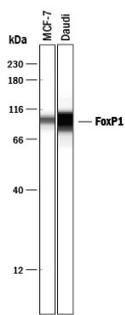
Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunocytochemistry	8-25 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below
Intracellular Staining by Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
Simple Western	10 µg/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

<p>Western Blot</p>  <p>Detection of Human FoxP1 by Western Blot. Western blot shows lysates of Daudi human Burkitt's lymphoma cell line and MCF-7 human breast cancer cell line. Gels were loaded with 25 µg of whole cell lysate (WCL) and 25 µg of nuclear extracts (Nuc). PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human FoxP1 Monoclonal Antibody (Catalog # MAB45341) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). Specific bands were detected for FoxP1 at approximately 65 and 80 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunocytochemistry</p>  <p>FoxP1 in BG01V Human Embryonic Stem Cells. FoxP1 was detected in immersion fixed BG01V human embryonic stem cells using Mouse Anti-Human FoxP1 Monoclonal Antibody (Catalog # MAB45341) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red, upper panel; Catalog # NL007) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei. View our protocol for Fluorescent ICC Staining of Stem Cells on Coverslips.</p>
<p>Immunohistochemistry</p>  <p>FoxP1 in Human Prostate. FoxP1 was detected in immersion fixed paraffin-embedded sections of human prostate using Mouse Anti-Human FoxP1 Monoclonal Antibody (Catalog # MAB45341) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to the nuclei of epithelial cells. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>	<p>Intracellular Staining by Flow Cytometry</p>  <p>Detection of FoxP1 in MCF-7 Human Cell Line by Flow Cytometry. MCF-7 human breast cancer cell line was stained with Mouse Anti-Human FoxP1 Monoclonal Antibody (Catalog # MAB45341, filled histogram) or isotype control antibody (Catalog # MAB002, open histogram), followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with methanol.</p>

Simple Western



Detection of Human FoxP1 by Simple Western™. Simple Western lane view shows lysates of MCF-7 human breast cancer cell line and Daudi human Burkitt's lymphoma cell line, loaded at 0.5 mg/mL. A specific band was detected for FoxP1 at approximately 99 kDa (as indicated) using 10 µg/mL of Mouse Anti-Human FoxP1 Monoclonal Antibody (Catalog # MAB45341). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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

Forkhead Box P1 (FOXP1) is a member of the FOX family of transcription factors. FoxP1 has been implicated in cardiac, lung, and lymphocyte development. FoxP1 knock out mice die at embryonic day 14.5 due to heart valve and outflow tract abnormalities. FoxP1 contains both a DNA binding domain as well as protein-protein interaction domains. FoxP1 can homo or heterodimerize with FoxP2 and FoxP4, with dimerization necessary for DNA binding. FoxP1 shows both oncogenic and tumor suppressive characteristics. Overexpression in lymphomas leads to poor prognosis, but loss of FoxP1 in breast cancer also implicates a poor prognosis. Human isoforms of 489 to 677 amino acids contain alternate sequences within the first 60 amino acids and/or deletion of amino acids.