

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human FoxC2 in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human FoxC2 Gly415-Tyr501 Accession # Q99958
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 FoxC2 by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line. Gels were loaded with 30 µg of whole cell lysate (WCL), 20 µg of cytoplasmic (Cyto), and 10 µg of nuclear extracts (Nuc). PVDF membrane was probed with 1 µg/mL Sheep Anti-Human FoxC2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5044) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band for FoxC2 was detected at approximately 70 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry

FoxC2 in HeLa Human Cell Line. FoxC2 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Sheep Anti-Human FoxC2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5044) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red, upper panel; Catalog # NL010) and counterstained with DAPI (blue, lower panel). Specific staining was localized to cytoplasm and nuclei. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Simple Western

Detection of Human FoxC2 by Simple Western™. Simple Western lane view shows lysates of HeLa human cervical epithelial carcinoma cell line, loaded at 0.2 mg/mL. A specific band was detected for FoxC2 at approximately 73 kDa (as indicated) using 10 µg/mL of Sheep Anti-Human FoxC2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5044) followed by 1:50 dilution of HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

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

FoxC2 belongs to a large family of nuclear transcription factor proteins sharing a common forkhead/winged helix DNA binding domain. FoxC2 is implicated in epithelial to mesenchymal transition, human lymphedema-distichiasis syndrome, and tumor metastasis. Experiments in mice indicate that FoxC2 controls adipocyte morphogenesis and null mice show defects in axial and cranial skeletogenesis, as well. In addition the transcriptional activity of FoxC2 influences expression of cytokine receptors such as CXCR4.