

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human FoxC2 in direct ELISAs and Western blots. Approximately 25% cross-reactivity with recombinant human (rh) FoxA1 (aa 253-472) is observed in Western blots but not in direct ELISAs. In direct ELISAs and Western blots, no cross-reactivity with rhFoxB1 (aa 191-324), D3 (aa 1-140), F1 (aa 129-354), J1 (aa 306-421), K1 (aa 493-670), M1 (aa 642-763), P1 (aa 231-420), P2 (aa 269-460), P3 (aa 179-279), or P4 (aa 229-410) is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 665819
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human FoxC2 Gly415-Tyr501 Accession # Q99958
<b>Formulation</b>	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.

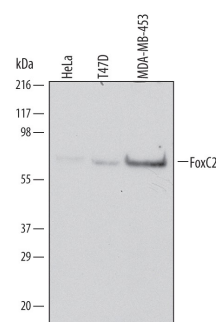
## APPLICATIONS

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	See Below
<b>Immunocytochemistry</b>	8-25 µg/mL	See Below

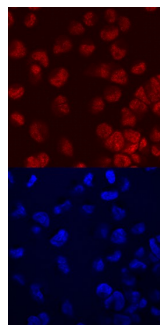
## DATA

### Western Blot



**Detection of Human FoxC2 by Western Blot.** Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line, T47D human breast cancer cell line, and MDA-MB-453 human breast cancer cell line. PVDF Membrane was probed with 1 µg/mL of Human FoxC2 Monoclonal Antibody (Catalog # MAB5044) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for FoxC2 at approximately 60 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

### Immunocytochemistry



**FoxC2 in MDA-MB-453 Human Cell Line.** FoxC2 was detected in immersion fixed MDA-MB-453 human breast cancer cell line using Human FoxC2 Monoclonal Antibody (Catalog # MAB5044) 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 Cells on Coverslips](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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.