

For Research Use Only

# FOXC2 Recombinant antibody

Catalog Number:83476-6-RR



## Basic Information

<b>Catalog Number:</b> 83476-6-RR	<b>GenBank Accession Number:</b> NM_005251	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1000 ug/ml	<b>GeneID (NCBI):</b> 2303	<b>CloneNo.:</b> 240403A2
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q99958	<b>Recommended Dilutions:</b> WB 1:5000-1:50000
<b>Isotype:</b> IgG	<b>Full Name:</b> forkhead box C2 (MFH-1, mesenchyme forkhead 1)	
<b>Immunogen Catalog Number:</b> AG33121	<b>Calculated MW:</b> 54kd	
	<b>Observed MW:</b> 54-68 kDa	

## Applications

**Tested Applications:**  
WB, FC (Intra), ELISA

**Species Specificity:**  
human

### Positive Controls:

WB : A549 cells, A 375 cells, HCT 116 cells, MCF-7 cells, HepG2 cells, MDA-MB-453 cells, SW480 cells

## Background Information

Forkhead box protein C2 (FOXC2) also known as forkhead-related protein FKHL14 (FKHL14), transcription factor FKHL14, or mesenchyme fork head protein 1 (MFH1) is a protein that in humans is encoded by the FOXC2 gene. FOXC2 is a member of the fork head box (FOX) family of transcription factors. FOX transcription factors are expressed during development and are associated with a number of cellular and developmental differentiation processes. FOXC2 is required during early development of the kidneys, including differentiation of podocytes and maturation of the glomerular basement membrane. It is also involved in the early development of the heart. FOXC2 is also involved in cancer metastases. In particular, expression of FOXC2 is induced when epithelial cells undergo an epithelial-mesenchymal transition (EMT) and become mesenchymal looking cells. (PMID: 8674414 9169153 19935708) This antibody recognizes the 56 kDa FOXC2 protein, but the phosphorylated FOXC2 may be a 56-65 kDa protein. The 62kDa band was also detected in the study(PMID: 19540201).

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

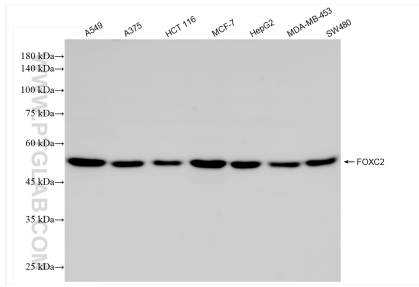
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

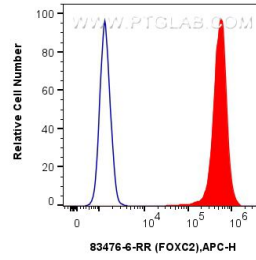
W: [ptgcn.com](http://ptgcn.com)

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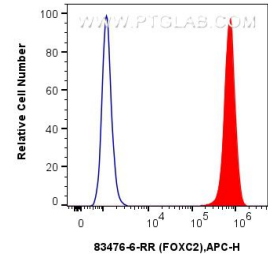
## Selected Validation Data



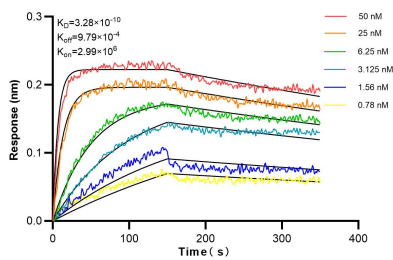
Various lysates were subjected to SDS PAGE followed by western blot with 83476-6-RR (FOXC2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



$1 \times 10^6$  HeLa cells were intracellularly stained with 0.25 ug FOXC2 Recombinant antibody (83476-6-RR, Clone:240403A2) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set.



$1 \times 10^6$  A549 cells were intracellularly stained with 0.25 ug FOXC2 Recombinant antibody (83476-6-RR, Clone:240403A2) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set.



Biolayer interferometry (BLI) kinetic assays of 83476-6-RR against Human FOXC2 were performed. The affinity constant is 0.328 nM.