

For Research Use Only

# FOXC2 Recombinant antibody

Catalog Number: 83476-5-RR



## Basic Information

<b>Catalog Number:</b> 83476-5-RR	<b>GenBank Accession Number:</b> NM_005251	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 2303	<b>CloneNo.:</b> 240403H7
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q99958	<b>Recommended Dilutions:</b> IF/ICC 1:150-1:600
<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	

## Applications

<b>Tested Applications:</b> IF/ICC, FC (Intra), ELISA	<b>Positive Controls:</b> IF/ICC : A375 cells,
<b>Species Specificity:</b> human	

## 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

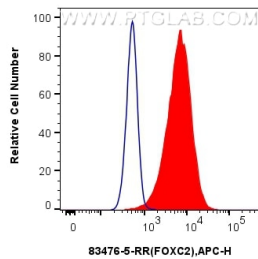
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

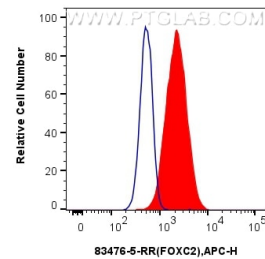
## Selected Validation Data



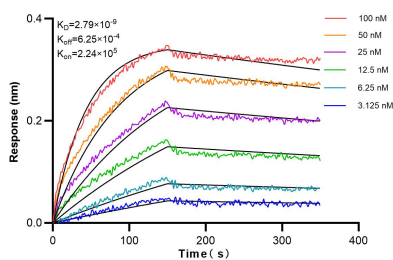
1x10<sup>6</sup> HeLa cells were intracellularly stained with 0.25 ug FOXC2 Recombinant antibody (83476-5-RR, Clone:240403H7) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Immunofluorescent analysis of (4% PFA) fixed A375 cells using FOXC2 antibody (83476-5-RR, Clone: 240403H7 ) at dilution of 1:300 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1), CL594-Phalloidin (red).



1x10<sup>6</sup> A549 cells were intracellularly stained with 0.25 ug FOXC2 Recombinant antibody (83476-5-RR, Clone:240403H7) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Biolayer interferometry (BLI) kinetic assays of 83476-5-RR against Human FOXC2 were performed. The affinity constant is 2.79 nM.