For Research Use Only

## FOXC2 Recombinant antibody, PBS Only

Catalog Number:83476-6-PBS



**Purification Method:** 

Protein A purfication

CloneNo.:

240403A2

**Basic Information** 

Catalog Number: 83476-6-PBS

Size: 1 mg/ml

Isotype:

GenBank Accession Number:

forkhead box C2 (MFH-1,

NM\_005251

GeneID (NCBI):

2303

Source: **UNIPROT ID:** Rabbit Q99958 Full Name:

mesenchyme forkhead 1) Immunogen Catalog Number: Calculated MW:

AG33121

54kd

Observed MW: 54-68 kDa

**Applications** 

**Tested Applications:** 

WB, FC (Intra), Indirect ELISA

Species Specificity:

## **Background Information**

Forkhead box protein C2 (FOXC2) also known as forkhead-related protein FKHL14 (FKHL14), transcription factor FKH-14, 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 epithelialmesenchymal 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:

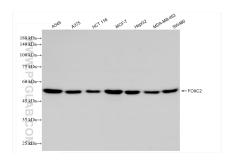
Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

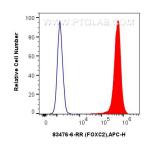
Storage Buffer:

PBS Only

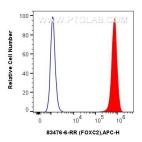
## **Selected Validation Data**



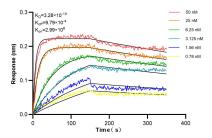
Various lysates were subjected to SDS PAGE followed by western blot with 83476-6-RR (FOXC2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83476-6-PBS in a different storage buffer formulation.



1x10^6 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. This data was developed using the same antibody clone with 83476-6-PBS in a different storage buffer formulation.



1x10^6 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. This data was developed using the same antibody clone with 83476-6-PBS in a different storage buffer formulation.



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