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**Product Name: FOXC1 Rabbit Monoclonal Antibody****Catalog #: AMRe85578**

For research use only.

**Summary**

<b>Description</b>	Recombinant rabbit monoclonal antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IP
<b>Reactivity</b>	Mouse
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Monoclonal
<b>Form</b>	Liquid
<b>Concentration</b>	
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Purified antibody in TBS with 0.05% sodium azide,0.05%protective protein and 50% glycerol.
<b>Purification</b>	Affinity Purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:1000,IP 1:10-1:20
<b>Molecular Weight</b>	Calculated MW: 57 kDa; Observed MW: 75 kDa

**Antigen Information**

<b>Gene Name</b>	FOXC1
<b>Alternative Names</b>	ARA; IGDA; IHG1; FKHL7; IRID1; RIEG3; FREAC3; FREAC-3
<b>Gene ID</b>	2296.0
<b>SwissProt ID</b>	Q12948
<b>Immunogen</b>	Recombinant protein of human FOXC1

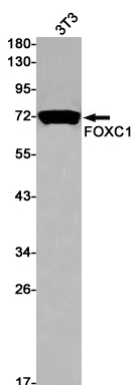
**Background**

DNA-binding transcriptional factor that plays a role in a broad range of cellular and developmental processes such as eye, bones, cardiovascular, kidney and skin development (PubMed:11782474, PubMed:15299087, PubMed:15684392, PubMed:16492674, PubMed:27907090, PubMed:14506133, PubMed:14578375, PubMed:15277473, PubMed:16449236,

PubMed:17210863, PubMed:19793056, PubMed:19279310, PubMed:25786029, PubMed:27804176). Acts either as a transcriptional activator or repressor (PubMed:11782474). Binds to the consensus binding site 5'-[G/C][A/T]AAA[T/C]AA[A/C]-3' in promoter of target genes (PubMed:7957066, PubMed:11782474, PubMed:12533514, PubMed:14506133, PubMed:19793056, PubMed:27804176). Upon DNA-binding, promotes DNA bending (PubMed:7957066, PubMed:14506133). Acts as a transcriptional coactivator (PubMed:26565916). Stimulates Indian hedgehog (Ihh)-induced target gene expression mediated by the transcription factor GLI2, and hence regulates endochondral ossification . Acts also as a transcriptional coregulator by increasing DNA-binding capacity of GLI2 in breast cancer cells (PubMed:26565916). Regulates FOXO1 through binding to a conserved element, 5'-GTAAACAAA-3' in its promoter region, implicating FOXC1 as an important regulator of cell viability and resistance to oxidative stress in the eye (PubMed:17993506). Cooperates with transcription factor FOXC2 in regulating expression of genes that maintain podocyte integrity . Promotes cell growth inhibition by stopping the cell cycle in the G1 phase through TGF $\beta$ 1-mediated signals (PubMed:12408963). Involved in epithelial-mesenchymal transition (EMT) induction by increasing cell proliferation, migration and invasion (PubMed:20406990, PubMed:22991501). Involved in chemokine CXCL12-induced endothelial cell migration through the control of CXCR4 expression . Plays a role in the gene regulatory network essential for epidermal keratinocyte terminal differentiation (PubMed:27907090). Essential developmental transcriptional factor required for mesoderm-derived tissues, such as the somites, skin, bone and cartilage. Positively regulates CXCL12 and stem cell factor expression in bone marrow mesenchymal progenitor cells, and hence plays a role in the development and maintenance of mesenchymal niches for haematopoietic stem and progenitor cells (HSPC). Plays a role in corneal transparency by preventing both blood vessel and lymphatic vessel growth during embryonic development in a VEGF-dependent manner. Involved in chemokine CXCL12-induced endothelial cell migration through the control of CXCR4 expression . May function as a tumor suppressor (PubMed:12408963).

## Research Area

## Image Data



Western blot analysis of FOXC1 in 3T3 lysates using FOXC1 antibody.