FOXC1 RABBIT MAB

Cat.#: N262233
Product Name: Anti-FOXC1 Rabbit Monoclonal Antibody
Synonyms: ARA; IGDA; IHG1; FKHL7; IRID1; RIEG3; FREAC3; FREAC-3
UNIPROT ID: Q12948

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 TGFB1-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).

Immunogen: Recombinant protein of human FOXC1

Applications: WB,IP

Recommended Dilutions: WB: 1/500-1/1000 IP: 1/20

Host Species: Rabbit

Clonality: Rabbit Monoclonal

Clone ID: R06-3B5

MW: Calculated MW: 57 kDa; Observed MW: 75 kDa

Isotype: IgG

Purification: Affinity Purified

Species Reactivity: Mouse

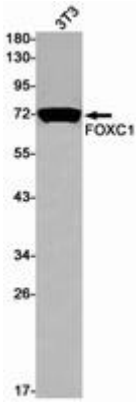
Conjugation: Unconjugated

Modification: Unmodified

Constituents: PBS (without Mg2+ and Ca2+), pH 7.3 containing 50% glycerol, 0.5% BSA and 0.02% sodium azide

Research Areas: Epigenetics and Nuclear Signaling

Storage & Shipping: Store at -20°C. Avoid repeated freezing and thawing



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