

Rabbit FOXC1/2 Polyclonal Antibody | anti-FOXC1 antibody

FOXC1/2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA323954	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

PRODUCT SYNONYMS

FOXC1/2; Polyclonal Antibody; FOXC1/2 Antibody; ARA; FKH L7; FKHL 7; FKHL7; Forkhead (Drosophila) like 7; Forkhead box C1; Forkhead box protein C1; Forkhead drosophila homolog like 7; Forkhead like 7; Forkhead related activator 3; Forkhead related protein FKHL7; Forkhead related transcription factor 3; Forkhead-related protein FKHL7; Forkhead-related transcription factor 3; FOX C1; FOXC 1; Foxc1; FOXC1_HUMAN; FREAC 3; FREAC-3; FREAC3; IGDA; IHG 1; IHG1; IRID 1; IRID1; Iridogoniogenesis type 1; Myeloid factor delta; Drosophila Forkhead Homolog Like 14; FKHL 14; FKHL14; Forkhead Box C2; Forkhead box protein C2; Forkhead related protein FKHL14; Forkhead-related protein FKHL14; FOX C2; Foxc2; FOXC2_HUMAN; LD; Mesenchyme fork head protein 1; Mesenchyme Forkhead 1; MFH 1; MFH 1 protein; MFH-1 protein; MFH1; Transcription factor FKH 14; Transcription factor FKH-14; anti-FOXC1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	FOXC1/2 antibody detects endogenous levels of total FOXC1/2
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	553
Applicable Applications for anti-FOXC1 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide
Subcellular Location	Nucleus.
Tissue Specificity	Expressed in keratinocytes of epidermis and hair follicle (PubMed:27907090). Expressed strongly in microvascular invasion (MVI) formation, basal-like breast cancer (BLBC) and hepatocellular tumors (PubMed:20406990, PubMed:22991501). Expressed in breast cancers (at protein level) (PubMed:26565916). Expressed in hematopoietic cells (PubMed:8499623).
Predicted Cross Reactivity	Pig, Xenopus
Similarity	Pig (100%), Xenopus (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



WB (Western Blot)

Western blot analysis of extracts from RAW264.7 cells, using FOXC1/2 antibody. The lane on the left is treated with the antigen-specific peptide.



IF (Immunofluorescence)

AAA323954 staining RAW264.7 cells by IF/ICC. The sample was fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.



WB (Western Blot)

Western blot analysis of extracts from HUVEC, using FOXC1/2 Antibody. Lane 1 was treated with the blocking peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-FOXC1 antibody

Function: 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 (By similarity). 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 FOXO1 as an important regulator of cell viability and resistance to oxidative stress in the eye (PubMed:17993506). Cooperates with transcription factor FOXO2 in regulating expression of genes that maintain podocyte integrity (By similarity). Promotes cell growth inhibition by stopping the cell cycle in the G1 phase through TGFBI-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 (By similarity). 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 (By similarity). May function as a tumor suppressor (PubMed:12408963).

Subunit Structure: Monomer. Interacts with C1QBP (PubMed:18676636). Interacts (via N-terminus) with GLI2 (via C-terminal internal region); this interaction is direct and increases GLI2 DNA-binding and transcriptional activity through a smoothened (SMO)-independent Hedgehog (Hh) signaling pathway (PubMed:26565916). Interacts (via C-terminus domain) with PITX2 isoform 3 (via homeobox domain) (PubMed:16449236). Interacts with FLNA and PBX1 (PubMed:15684392).

Post-translational Modifications: Phosphorylated (PubMed:11782474, PubMed:19279310, PubMed:25786029). Phosphorylated on Ser-272 in response to epidermal growth factor (EGF) in a ERK1/2 MAPK-dependent signaling pathway; phosphorylation contributes to its protein stability and transcriptional activity (PubMed:16492674). Sumoylated preferentially with SUMO2 or SUMO3 (PubMed:22493429). Desumoylated by SENP2 (PubMed:22493429). Ubiquitinated, leading to its proteasomal degradation (PubMed:16492674).

NCBI AND UNIPROT INFORMATION

NCBI GI #	119395716
NCBI GeneID	2296
NCBI Accession #	NP_001444.2
NCBI GenBank Nucleotide #	NM_001453.3
UniProt Accession #	Q12948; Q86UP7; Q9BYM1; Q9NUE5; Q9UDD0; Q9UP06
Molecular Weight	Observed: 57 kD Predicted: 57 kDa
NCBI Official Full Name	forkhead box protein C1
NCBI Official Synonym Full Names	forkhead box C1
NCBI Official Symbol	FOXC1
NCBI Official Synonym Symbols	ARA; IGDA; IHG1; ASGD3; FKHL7; IRID1; RIEG3; FREAC3; FREAC-3
NCBI Protein Information	forkhead box protein C1
UniProt Protein Name	Forkhead box protein C1
UniProt Gene Name	FOXC1
UniProt Synonym Gene Names	FKHL7; FREAC3; FREAC-3

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/foxc1-2-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/323954>