

FOXC1 (internal) Antibody (internal region)
Peptide-affinity purified goat antibody
Catalog # AF2475a**Specification**

FOXC1 (internal) Antibody (internal region) - Product Information

Application	WB
Primary Accession	Q12948
Other Accession	NP_001444.2 , 2296
Reactivity	Human
Predicted	Mouse, Pig
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	56789

FOXC1 (internal) Antibody (internal region) - Additional Information**Gene ID** 2296**Other Names**

Forkhead box protein C1, Forkhead-related protein FKHL7, Forkhead-related transcription factor 3, FREAC-3, FOXC1, FKHL7, FREAC3

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

FOXC1 (internal) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

FOXC1 (internal) Antibody (internal region) - Protein Information**Name** FOXC1**Synonyms** FKHL7, FREAC3**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:15299087)

<http://www.uniprot.org/citations/15684392> target="_blank">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 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 (By similarity). Promotes cell growth inhibition by stopping the cell cycle in the G1 phase through TGF β 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 (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).

Cellular Location

Nucleus Note=Colocalizes with PITX2 isoform 3 in the nucleus at subnuclear chromatine regions (PubMed:16449236). Colocalizes with CBX5 to a heterochromatin-rich region of the nucleus

(PubMed:15684392) Colocalizes with GLI2 in the nucleus (By similarity)
{ECO:0000250|UniProtKB:Q61572, ECO:0000269|PubMed:15684392,
ECO:0000269|PubMed:16449236}

Tissue Location

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).

FOXC1 (internal) Antibody (internal region) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

FOXC1 (internal) Antibody (internal region) - Images



AF2475a (2 µg/ml) staining of HEK293 lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

FOXC1 (internal) Antibody (internal region) - References

FOXC1 transcriptional regulatory activity is impaired by PBX1 in a filamin A-mediated manner. Berry FB, O'Neill MA, Coca-Prados M, Walter MA. Mol Cell Biol. 2005 Feb;25(4):1415-24. PMID: 15684392