

FOX C2 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP59076**Specification**

FOX C2 Polyclonal Antibody - Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q99958
Reactivity	Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	53 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human FOX C2
Epitope Specificity	101-200/501
Isotype	IgG
Purity	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nucleus.
SIMILARITY	Contains 1 fork-head DNA-binding domain.
DISEASE	Defects in FOXC2 are the cause of lymphedema hereditary type 2 (LMPH2) [MIM:153200]; also known as Meige lymphedema. Hereditary lymphedema is a chronic disabling condition which results in swelling of the extremities due to altered lymphatic flow. Patients with lymphedema suffer from recurrent local infections, and physical impairment. Defects in FOXC2 are a cause of lymphedema-yellow nails (LYYN) [MIM:153300]. LYYN is characterized by yellow, dystrophic, thick and slowly growing nails, associated with lymphedema and respiratory involvement. Lymphedema occurs more often in the lower limbs. It can appear at birth or later in life. Onset generally follows the onset of unguis abnormalities. Defects in FOXC2 are a cause of lymphedema-distichiasis (LYD) [MIM:153400]. LYD is characterized by primary limb lymphedema usually starting at puberty (but in some cases later or at birth) and associated with distichiasis (double rows of eyelashes, with extra eyelashes growing from the Meibomian gland orifices).
Important Note	This product as supplied is intended for

**research use only, not for use in human,
therapeutic or diagnostic applications.**

Background Descriptions

FOXC2 is a member of forkhead/winged helix transcription factor family, whose members serve as key regulators in embryogenesis and cell differentiation (3). FOXC2 functions as a key regulator of adipocyte metabolism by increasing the sensitivity of the beta-adrenergic-cAMP-protein kinase A (PKA) signaling pathway through alteration of adipocyte PKA holoenzyme composition (4). Increased FOXC2 levels, induced by high fat diet, seem to counteract most of the symptoms associated with obesity (4). FOXC2 expression is also associated with the early stage of chondrogenic differentiation both in vivo and in vitro (3). FOXC2 haploinsufficiency results in Lymphedema-distichiasis (LD), an autosomal dominant disorder that classically presents as lymphedema of the limbs, and double rows of eyelashes (distichiasis) (5). Mutant mice null for FOXC2 show defects in axial and cranial skeletogenesis, suggesting a requirement of FOXC2 for skeletal tissue development (3). FOXC2 interacts with FOXC1 in the Notch signaling pathway (1) and in kidney and heart development (2).

FOX C2 Polyclonal Antibody - Additional Information

Gene ID 2303

Other Names

Forkhead box protein C2, Forkhead-related protein FKHL14, Mesenchyme fork head protein 1, MFH-1 protein, Transcription factor FKH-14, FOXC2, FKHL14, MFH1

Dilution

WB~1:1000
IHC-P~N/A
IHC-F~N/A
IF~1:50~200
ICC~N/A
E~N/A

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

FOX C2 Polyclonal Antibody - Protein Information

Name FOXC2

Synonyms FKHL14, MFH1

Function

Transcriptional activator.

Cellular Location

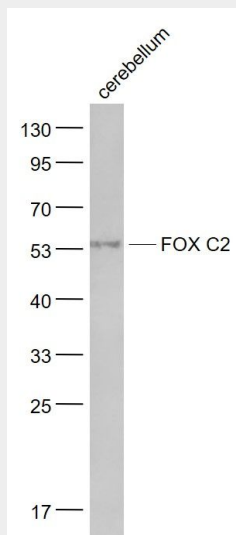
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00089, ECO:0000269|PubMed:23878394, ECO:0000269|PubMed:28179430}

FOX C2 Polyclonal Antibody - 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](#)

FOX C2 Polyclonal Antibody - Images



Sample:

Cerebellum (Mouse) Lysate at 40 ug

Primary: Anti- FOX C2 (bs-8730R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 53 kD

Observed band size: 53 kD