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Rabbit Anti-FOX C2 antibody

SL8730R

Product Name:	FOX C2
Chinese Name:	叉头相关转录因子C2抗体
Alias:	Drosphilia Forkhead Homolog Like 14; Drosphilia Forkhead Homolog Like 14; FKHL 14; FKHL 14; FKHL14; Forkhead Box C2; 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; Mesenchyme Forkhead 1; MFH 1; MFH 1; MFH 1 protein; MFH-1 protein; MFH1; Transcription factor FKH 14; Transcription factor FKH-14.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Cow,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	53kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human FOX C2:101-200/501
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	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).

Function:
Transcriptional activator. Might be involved in the formation of special mesenchymal tissues.

Subcellular Location:
Nucleus.

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 ungual 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).

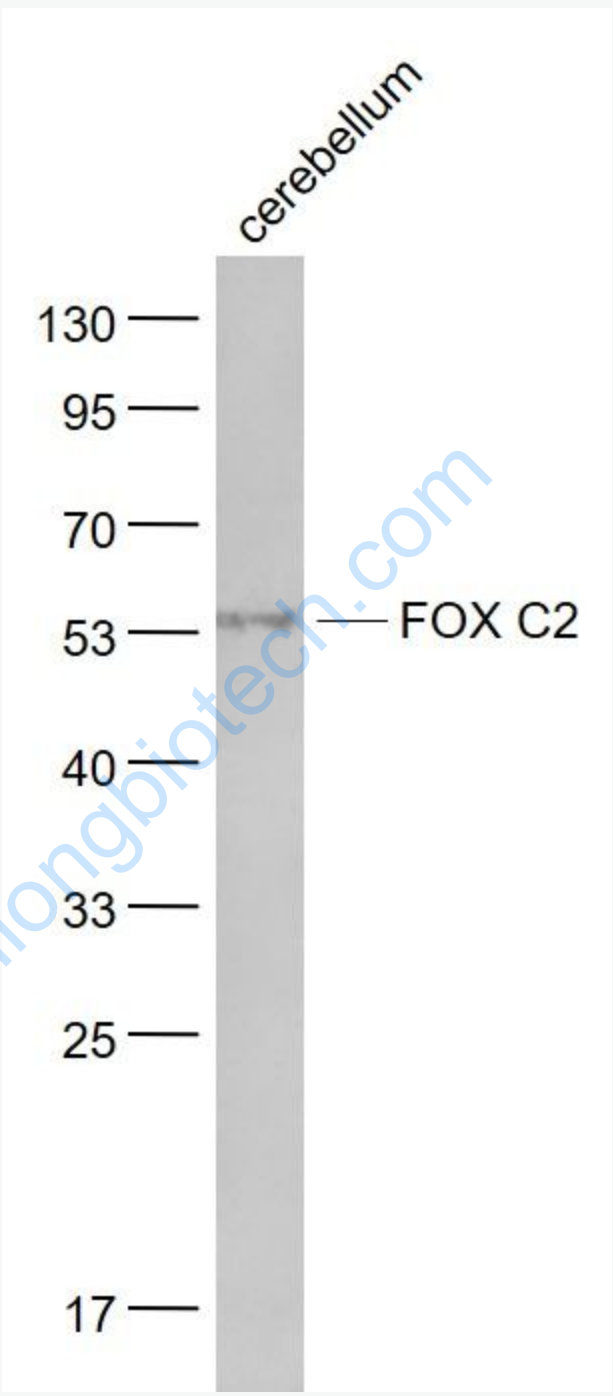
Similarity:
Contains 1 fork-head DNA-binding domain.

SWISS:
Q99958

Gene ID:
2303

Database links:

	Entrez Gene: 2303Human Entrez Gene: 14234Mouse Entrez Gene: 171356Rat Omim: 602402Human SwissProt: Q99958Human SwissProt: Q61850Mouse SwissProt: Q63246Rat Unigene: 436448Human Unigene: 14092Mouse Unigene: 216723Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:	 Sample: Cerebellum (Mouse) Lysate at 40 ug Primary: Anti- FOX C2 (SL8730R) at 1/1000 dilution

	Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 53 kD Observed band size:53 kD