For Research Use Only

FOXK2 Recombinant antibody

Catalog Number:83735-4-RR



Basic Information

Catalog Number: GenBank Accession Number:

83735-4-RR NM_004514.3

GeneID (NCBI): Size: 100ul , Concentration: 1000 $\mu g/ml$ by 3607

Nanodrop; UNIPROT ID: Source Q01167 Rabbit

Full Name: forkhead box K2 Isotype IgG Calculated MW:

Immunogen Catalog Number: 69 kDa

AG33625 Observed MW:

69-79 kDa

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

Species Specificity:

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed

with citrate buffer pH 6.0

Purification Method:

Protein A purfication

CloneNo.:

240692A5

Recommended Dilutions:

WB 1:5000-1:50000 IHC 1:500-1:2000 IF/ICC 1:200-1:800

Positive Controls:

WB: HEK-293T cells, HeLa cells, MCF-7 cells, T-47D

cells, MDA-MB-231 cells, U2OS cells

IHC: human placenta tissue,

IF/ICC: A431 cells,

Background Information

FOXK2 (forkhead box K2), also known as ILF and ILF1. FOXK2 is localized at nucleus and cytoplasm. It is also expected to be expressed in testis, brain and lymphoid and non-lymphoid cells (PMID: 1339390). The protein encoded by this gene contains a fork head DNA binding domain. This protein can bind to the purine-rich motifs of the HIV long terminal repeat (LTR), and to the similar purine-rich motif in the interleukin 2 (IL2) promoter. It may be involved in the regulation of viral and cellular promoter elements. And its molecular weight is 69 kDa. Anett Marais demonstrate that FOXK2 is phosphorylated in a cell cycle-dependent manner. This phosphorylation peaks during M phase and is mediated by CDK-cyclin complexes. FOXK2 exhibits a periodic rise in its phosphorylation levels during the cell cycle, with hyperphosphorylation occurring in mitotic cells (PMID: 20810654).

Storage

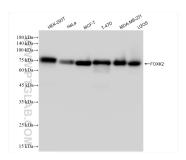
Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

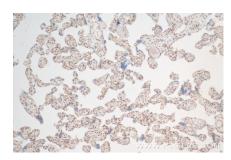
*** 20ul sizes contain 0.1%BSA

Aliquoting is unnecessary for -20°C storage

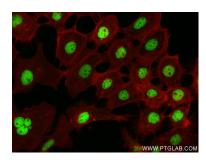
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 83735-4-RR (FOXK2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



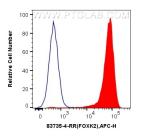
Immunohistochemical analysis of paraffinembedded human placenta tissue slide using 83735-4-RR (FOXK2 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



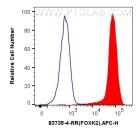
Immunofluorescent analysis of (4% PFA) fixed A431 cells using FOXK2 antibody (83735-4-RR, Clone: 240692A5) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



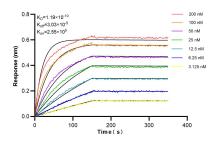
Immunofluorescent analysis of (4% PFA) fixed A431 cells using FOXK2 antibody (83735-4-RR, Clone: 240692A5) at dilution of 1:250 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



1x10^6 SH-SY5Y cells were intracellularly stained with 0.25 ug FOXK2 Recombinant antibody (83735-4-RR, Clone:240692A5) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



1x10^6 HEK-293T cells were intracellularly stained with 0.25 ug FOXK2 Recombinant antibody (83735-4-RR, Clone:240692A5) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Biolayer interferometry (BLI) kinetic assays of 83735-4-RR against Human FOXK2 were performed. The affinity constant is 0.119 nM.