ARG63369
anti-FOXK2 / ILF antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes FOXK2 / ILF
Tested Reactivity	Hu
Tested Application	FACS, ICC/IF, WB
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	FOXK2 / ILF
Species	Human
Immunogen	C-TPPAAVREKGVQN
Conjugation	Un-conjugated
Alternate Names	ILF; ILF1; ILF-1; nGTBP; Forkhead box protein K2; Cellular transcription factor ILF-1

Application Instructions

Application table

Application	Dilution
FACS	Assay - dependent
ICC/IF	Assay - dependent
WB	0.3 - 1.0 µg/ml

Application Note

WB: Recommend incubate at RT for 1h.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

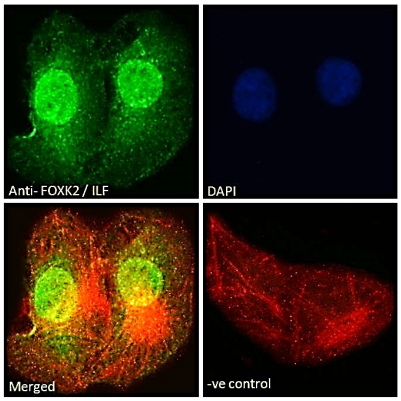
Form	Liquid
Purification	Purified from goat serum by antigen affinity chromatography.
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	0.5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

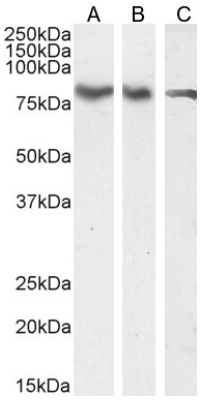
Database links	GeneID: 3607 Human Swiss-port # Q01167 Human
Gene Symbol	FOXK2
Gene Full Name	forkhead box K2
Background	The protein encoded by this gene contains a fork head DNA binding domain. This protein can bind to the purine-rich motifs of the HIV long terminal repeat (LTR), and to the similar purine-rich motif in the interleukin 2 (IL2) promoter. It may be involved in the regulation of viral and cellular promoter elements. [provided by RefSeq, Jul 2008]
Function	Transcriptional regulator involved in different processes such as glucose metabolism, aerobic glycolysis and autophagy (By similarity). Recognizes and binds the forkhead DNA sequence motif (5'-GTAAACA-3') and can both act as a transcription activator or repressor, depending on the context (PubMed:22083952, PubMed:25451922). Together with FOXK1, acts as a key regulator of metabolic reprogramming towards aerobic glycolysis, a process in which glucose is converted to lactate in the presence of oxygen (By similarity). Acts by promoting expression of enzymes for glycolysis (such as hexokinase-2 (HK2), phosphofructokinase, pyruvate kinase (PKLR) and lactate dehydrogenase), while suppressing further oxidation of pyruvate in the mitochondria by up-regulating pyruvate dehydrogenase kinases PDK1 and PDK4 (By similarity). Probably plays a role in gluconeogenesis during overnight fasting, when lactate from white adipose tissue and muscle is the main substrate (By similarity). Together with FOXK1, acts as a negative regulator of autophagy in skeletal muscle: in response to starvation, enters the nucleus, binds the promoters of autophagy genes and represses their expression, preventing proteolysis of skeletal muscle proteins (By similarity). In addition to the 5'-GTAAACA-3' DNA motif, also binds the 5'-TGANTCA-3' palindromic DNA motif, and co-associates with JUN/AP-1 to activate transcription (PubMed:22083952). Also able to bind to a minimal DNA heteroduplex containing a G/T-mismatch with 5'-TRT[G/T]NB-3' sequence (PubMed:20097901). Binds to NFAT-like motifs (purine-rich) in the IL2 promoter (PubMed:1339390). Positively regulates WNT/beta-catenin signaling by translocating DVL proteins into the nucleus (PubMed:25805136). Also binds to HIV-1 long terminal repeat. May be involved in both positive and negative regulation of important viral and cellular promoter elements (PubMed:1909027). [UniProt]
Research Area	Gene Regulation antibody; Immune System antibody
Calculated Mw	69 kDa
Cellular Localization	Nucleus. [UniProt]

Images



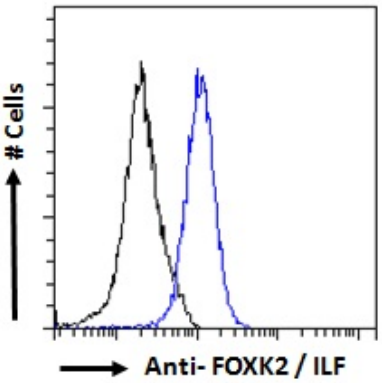
ARG63369 anti-FOXK2 / ILF antibody ICC/IF image

Immunofluorescence: Paraformaldehyde fixed U2OS cells permeabilized with 0.15% Triton. Cells were stained with ARG63369 anti-FOXK2 / ILF antibody (green) at 10 µg/ml dilution for 1 hour. DAPI (blue) for nuclear staining. Phalloidin (red) for Actin filaments staining. Negative control: Unimmunized goat IgG (green) at 10 µg/ml dilution.



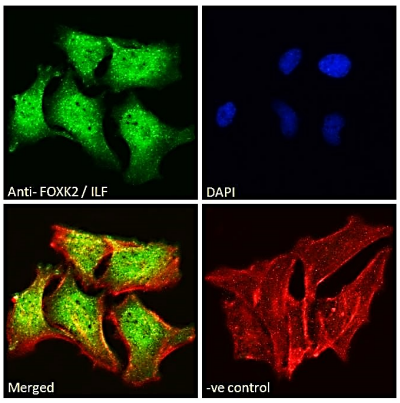
ARG63369 anti-FOXK2 / ILF antibody WB image

Western blot: 35 µg of HEK293 (A), HeLa (B) and Jurkat (C) nuclear lysates (in RIPA buffer) stained with ARG63369 anti-FOXK2 / ILF antibody at 0.03 µg/ml dilution and incubated at RT for 1 hour.



ARG63369 anti-FOXK2 / ILF antibody FACS image

Flow Cytometry: Paraformaldehyde-fixed HeLa cells permeabilized with 0.5% Triton. Cells were stained with ARG63369 anti-FOXK2 / ILF antibody (blue line) at 10 µg/ml dilution for 1 hour, followed by incubation with Alexa FluorR 488 labelled secondary antibody. IgG control: Unimmunized goat IgG (black line).



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