

FOXK2 antibody - C-terminal region
Rabbit Polyclonal Antibody
Catalog # AI16241**Specification**

FOXK2 antibody - C-terminal region - Product Information

Application	WB
Primary Accession	Q01167
Other Accession	NM_004514 , NP_004505
Reactivity	Human, Mouse, Rat, Rabbit, Horse
Predicted	Human, Mouse, Rat, Rabbit, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	69kDa KDa

FOXK2 antibody - C-terminal region - Additional Information**Gene ID 3607**Alias Symbol **ILF, ILF1, ILF-1****Other Names**

Forkhead box protein K2, Cellular transcription factor ILF-1, FOXK1, Interleukin enhancer-binding factor 1, FOXK2, ILF, ILF1

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 100 ul of distilled water. Final anti-FOXK2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

FOXK2 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

FOXK2 antibody - C-terminal region - Protein Information**Name FOXK2****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).

Cellular Location

Nucleus. Cytoplasm {ECO:0000250|UniProtKB:Q3UCQ1}

Tissue Location

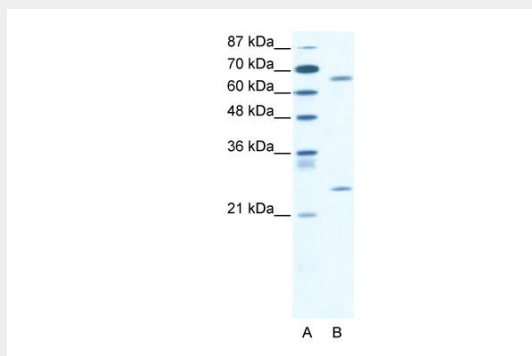
Expressed in both lymphoid and non-lymphoid cells.

FOXK2 antibody - C-terminal 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](#)

FOXK2 antibody - C-terminal region - Images



WB Suggested Anti-FOXK2 Antibody Titration: 2.5µg/ml
ELISA Titer: 1:62500

Positive Control: Jurkat cell lysate

FOXK2 antibody - C-terminal region - Background

Recognizes the core sequence 5'-TAAACA-3'. Binds to NFAT-like motifs (purine-rich) in the IL2 promoter. Also binds to HIV-1 long terminal repeat. May be involved in both positive and negative regulation of important viral and cellular promoter elements.

FOXK2 antibody - C-terminal region - References

Li C.,et al.Proc. Natl. Acad. Sci. U.S.A. 88:7739-7743(1991).
Li C.,et al.Genomics 13:665-671(1992).
Nirula A.,et al.Submitted (MAY-1996) to the EMBL/GenBank/DDBJ databases.
Zody M.C.,et al.Nature 440:1045-1049(2006).
Matsuoka S.,et al.Science 316:1160-1166(2007).