

**FOXK2 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP14381a****Specification**

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**FOXK2 Antibody (N-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q01167</a>
Other Accession	<a href="#">NP_004505.2</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	69062
Antigen Region	144-173

**FOXK2 Antibody (N-term) - Additional Information****Gene ID** 3607**Other Names**

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

**Target/Specificity**

This FOXK2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 144-173 amino acids from the N-terminal region of human FOXK2.

**Dilution**

WB~~1:1000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

FOXK2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**FOXK2 Antibody (N-term) - 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**

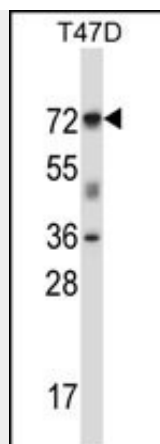
Expressed in both lymphoid and non-lymphoid cells.

**FOXK2 Antibody (N-term) - 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 (N-term) - Images**



FOXC2 Antibody (N-term) (Cat. #AP14381a) western blot analysis in T47D cell line lysates (35ug/lane). This demonstrates the FOXC2 antibody detected the FOXC2 protein (arrow).

#### **FOXC2 Antibody (N-term) - 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].

#### **FOXC2 Antibody (N-term) - References**

Fujii, Y., et al. J. Biochem. 147(5):705-709(2010)  
Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007)  
Matsuoka, S., et al. Science 316(5828):1160-1166(2007)  
Beausoleil, S.A., et al. Nat. Biotechnol. 24(10):1285-1292(2006)  
Tsai, K.L., et al. J. Biol. Chem. 281(25):17400-17409(2006)