

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human FoxK1 in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant mouse FoxK1 is observed and less than 5% cross-reactivity with recombinant human (rh) FoxK2 and rhFoxJ1 is observed.                          |
| <b>Source</b>             | Polyclonal Goat IgG                                                                                                                                                                                                                                                         |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human FoxK1<br>Lys493-Lys670<br>Accession # P85037                                                                                                                                                                                      |
| <b>Conjugate</b>          | Alexa Fluor 532<br>Excitation Wavelength: 534 nm<br>Emission Wavelength: 553 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

#### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

|                             |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

#### PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

#### BACKGROUND

FOX K1 (Forkhead box protein K1; also MNF) is a 75 kDa (predicted) nuclear protein that is a Class 1 member of the FOX family of transcription factors. It should not be confused with FOXK2/ILF1 that has also been referred to as FOXK1. It is widely expressed, but has become known as a marker for skeletal muscle satellite cells in the adult. Human FOXK1 is 733 amino acids (aa) in length. It contains one FHA domain that binds phosphopeptides (aa 116-203), plus a forkhead DNA binding region (aa 305-400) and over a dozen Ser/Thr phosphorylation sites. There are multiple potential splice variants. Two utilize an alternative start site at Met118 that may be accompanied by a 28 aa substitution for aa 673-733, while another contains 24 aa substitution for aa 1-187. Over aa 493-670, human FOXK1 shares 90% aa identity with mouse FOXK1.

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