

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human/Mouse/Rat                                                                                                                                                                                                                                                             |
| <b>Specificity</b>        | Detects human, mouse, and rat FKBP38 in Western blots. In Western blots, less than 1% cross-reactivity with recombinant human FKBP-12, -12.6, -13, -25, -51, or -52 is observed.                                                                                            |
| <b>Source</b>             | Polyclonal Goat IgG                                                                                                                                                                                                                                                         |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | <i>E. coli</i> derived recombinant mouse FKBP38<br>Met1-Gly326<br>Accession # AAH03739                                                                                                                                                                                      |
| <b>Conjugate</b>          | Alexa Fluor 350<br>Excitation Wavelength: 346 nm<br>Emission Wavelength: 442 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

FK506 Binding Proteins (FKBPs) are intracellular receptors for the immuno-suppressive drug FK506. The FKBP/FK506 complex exerts its immunosuppressive effects by inhibiting calcineurin, a calcium- and calmodulin-dependent serine/threonine phosphatase that functions as a critical signaling molecule during T cell activation. FKBP38, also known as FKBP8, is a 355 amino acid (aa) protein with a calculated molecular weight of 38.7 kDa and an apparent molecular mass of ~60-64 kDa in SDS-PAGE. FKBP38 binds to and inhibits calcineurin even in the absence of FK506, indicating that FKBP38 is a constitutively active inhibitor of calcineurin. Additionally, FKBP38 immunoprecipitates with Bcl-2 and Bcl-xL, suggesting that FKBP38 may regulate apoptosis by anchoring Bcl-2 and Bcl-xL to mitochondrial membranes. Mouse FKBP38 shares 94% and 87% sequence identity with human and rat FKBP38, respectively.

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