

**DESCRIPTION**

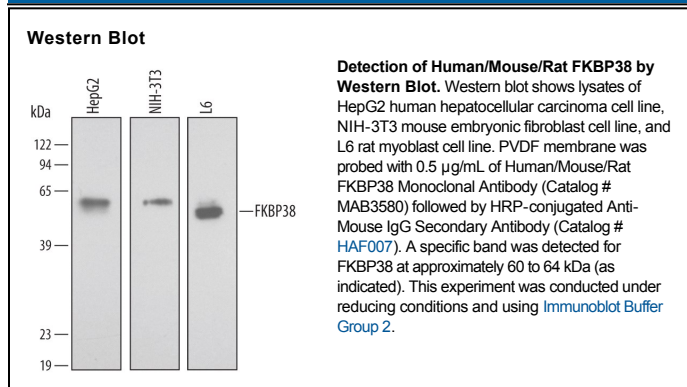
|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Human/Mouse/Rat   |
| <b>Specificity</b>        | Detects endogenous human, mouse and rat FKBP38 in Western blots.  |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>2B</sub> Clone # 391505   |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant  |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human FKBP38<br>Met58-Gly382<br>Accession # Q14318  |
| <b>Formulation</b>        | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

**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>Recommended Concentration</b> | <b>Sample</b> |
|---------------------|----------------------------------|---------------|
| <b>Western Blot</b> | 0.5 µg/mL                        | See Below     |

**DATA**



**PREPARATION AND STORAGE**

|                                |  |
|--------------------------------|--|
| <b>Reconstitution</b>          | Reconstitute at 0.5 mg/mL in sterile PBS.  |
| <b>Shipping</b>                | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.<br>*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C   |
| <b>Stability &amp; Storage</b> | <b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul> |

**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 to 412 amino acid (aa) protein with 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 co-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.