

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human STAT5a/b when phosphorylated at Y694/Y699 in Western blots.                                                                                                                                                                                                   |
| <b>Source</b>             | Monoclonal Rat IgG <sub>2A</sub> Clone # 941212                                                                                                                                                                                                                             |
| <b>Purification</b>       | Protein A or G purified from cell culture supernatant                                                                                                                                                                                                                       |
| <b>Immunogen</b>          | Phosphopeptide containing human STAT5b Y699 site (amino acid sequence of this peptide is identical to a corresponding region of human STAT5a containing Y694).<br>Accession # P51692                                                                                        |
| <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>Immunocytochemistry</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

Signal Transduction and Activator of Transcription 5B (STAT5b) is a member of the Jak/STAT signal transduction pathway and is activated by a variety of cytokines (IL-22, IL-6, IFNα). Upon cytokine activation, STAT5b is phosphorylated and translocates to the nucleus where it binds to the DNA consensus site TTCN<sub>3</sub>GAA and activates transcription of specific genes. STAT5b shares 93% amino acid identity with STAT5a. STAT5b is involved in a wide array of biological processes ranging from regulating apoptosis to adult mammary gland proliferation, differentiation and survival.

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