

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                               |
| <b>Specificity</b>                                                                                                                                                                                      | Detects endogenous human STAT2 in Western blots.                                    |
| <b>Source</b>                                                                                                                                                                                           | Monoclonal Mouse IgG <sub>1</sub> Clone # 545117                                    |
| <b>Purification</b>                                                                                                                                                                                     | Protein A or G purified from hybridoma culture supernatant                          |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human STAT2<br>aa 679-851<br>Accession # P52630 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 750<br>Excitation Wavelength: 749 nm<br>Emission Wavelength: 775 nm     |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                        |
| *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>Knockout Validated</b> | Optimal dilution of this antibody should be experimentally determined. |
| <b>Western Blot</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 transducer and activator of transcription 2 (STAT2) is a member of the transcription factor STAT family with an apparent M.W. of 113 kDa in SDS-PAGE gels. Human STAT2 is 851 amino acids (aa) in length and contains one SH2 domain (aa 572-667). Splicing variants produce two isoforms for human STAT2. The short isoform has a 32 aa substitution and a 199 aa deletion corresponding to aa 621-652 and aa 653-851 in the long isoform, respectively. Human STAT2 shares 73% and 65% aa sequence identity with rat and mouse STAT2, in that order. STAT2 functions as a signal transducer and activator of transcription that mediates signaling by type I IFNs (IFN- $\alpha$  and IFN- $\beta$ ), and it is also required for myogenic differentiation.

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