

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Jak3 in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 452524
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Jak3 Gly46-Thr209 Accession # P52333
<b>Conjugate</b>	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
<b>Formulation</b>	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.  *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.

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	0.25-1 µg/10 <sup>6</sup> cells	Jurkat human acute T cell leukemia cell line fixed with paraformaldehyde and permeabilized with saponin

## 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>	<b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul>

## BACKGROUND

Janus Kinase 3 (Jak3) belongs to the Jak family of protein tyrosine kinases that couple to cytokine receptors and are activated by ligand binding to these receptors. Also known as Leukocyte Janus Kinase (LJak), Jak3 is activated after binding to the gamma chain of Interleukin receptors, specifically the IL-2 and IL-4 receptors. Activation of Jak3 is associated with the rapid tyrosine phosphorylation of STAT proteins. Defects in Jak3 cause an autosomal severe combined immunodeficiency disease (SCID).

## PRODUCT SPECIFIC NOTICES

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