## 12-4321: Phospho-Jak1 (Tyr1022/1023) (Clone: F11) rabbit mAb PE Conjugate

| Clonality : | Monoclonal |
| :--- | :--- |
| Clone Name : | Jak1Y10221023-F11 |
| Application : | FACS |
| Reactivity : | Human, Mouse |
| Conjugate : | PE |
| Format : | Conjugated |
| Alternative Name : | Tyrosine-protein kinase JAK1, Janus kinase 1 |
| Isotype : | Rabbit lgG1k |
| Immunogen Information $:$A synthetic phospho-peptide corresponding to residues surrounding Tyr1022/1023 of human <br> phospho-Jak1 |  |

## Description

Jak1 plays an essential role in the IFN- alpha and IFN-g response pathways and is tyrosine-phosphorylated upon cellular exposure to these signals. Jak1 oral inhibitors have been used to benefit patients with advanced myelofibrosis, where Jak1 was initially shown to be constitutively active in the peripheral blood cells of these patients. Targeted, small-molecule Jak inhibitors have also been used for treatment of rheumatoid arthritis. In cases of advanced melanoma, acquired resistance to PD-1 blockade drugs is associated with loss-of-functions of mutations in Jak1/2 genes. These mutations block interferon gamma signaling and prevent programmed death ligand 1 (PD-L1) expression in tumor cells.

## Product Info

## Amount :

10 Tests / 100 Tests
Content : $\quad 1 X$ PBS, $0.09 \%$ NaN3, $0.2 \%$ BSA
Storage condition : Store at $2-8^{\circ} \mathrm{C}$. Avoid repeated freeze and thaw cycles.

## Application Note

For flow cytometric staining, the suggested use of this reagent is $5 \hat{A} \mu \mathrm{~L}$ per million cells or $5 \hat{A} \mu \mathrm{~L}$ per $100 \hat{A} \mu \mathrm{~L}$ of staining volume. It is recommended that the reagent be titrated for optimal performance for each application. See product image legends for additional information.


Fig-1: Flow cytometric analysis of Jurkat cells untreated and unstained as negative control (blue) or untreated (red) or treated with IFNa + IL-4 + pervanadate (green) and stained using Phospho-Jak1 (Tyr1022/1023) PE conjugated antibody Jak1Y10221023F11.

