

## 12-4320: Phospho-Jak1 (Tyr1022/1023) (Clone: F11) rabbit mAb

|                                |  |
|--------------------------------|--|
| <b>Clonality :</b>             | Monoclonal   |
| <b>Clone Name :</b>            | Jak1Y10221023-F11  |
| <b>Application :</b>           | FACS   |
| <b>Reactivity :</b>            | Human, Mouse   |
| <b>Conjugate :</b>             | Unconjugated   |
| <b>Format :</b>                | Purified   |
| <b>Alternative Name :</b>      | Tyrosine-protein kinase JAK1, Janus kinase 1   |
| <b>Isotype :</b>               | Rabbit IgG1k   |
| <b>Immunogen Information :</b> | A synthetic phospho-peptide corresponding to residues surrounding Tyr1022/1023 of human phospho-Jak1 |

### Description

Jak1 plays an essential role in the IFN- $\alpha$  and IFN- $\gamma$  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

|                            |   |
|----------------------------|---|
| <b>Amount :</b>            | 20 $\mu$ l / 200 $\mu$ l                                |
| <b>Content :</b>           | 1X PBS, 0.02% NaN <sub>3</sub> , 50% Glycerol, 0.1% BSA |
| <b>Storage condition :</b> | Store at -20°C. Avoid repeated freeze and thaw cycles.  |

### Application Note

1  $\mu$ g/mL - 0.001  $\mu$ g/mL. It is recommended that the reagent be titrated for optimal performance for each application. See product image legends for additional information.(0.5mg/ml, more than 200 western blots)

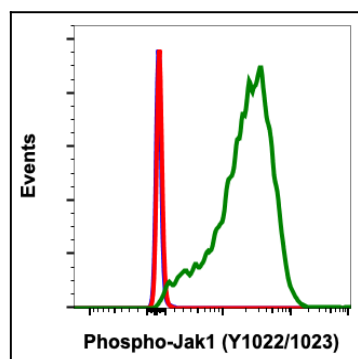


Fig-1: Flow cytometric analysis of Jurkat cells secondary antibody only negative control (blue) or untreated (red) or treated with IFN $\alpha$  + IL-4 + pervanadate (green) using Phospho-Jak1 (Tyr1022/1023) antibody Jak1Y10221023-F11 at 0.01  $\mu$ g/mL.

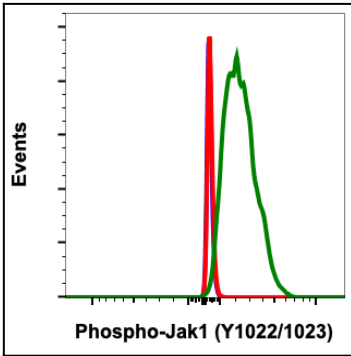


Fig 2 : Flow cytometric analysis of C2C12 cells secondary antibody only negative control (blue) or treated with imatinib (red) or with pervanadate (green) using Phospho-Jak1 (Tyr1022/1023) antibody Jak1Y10221023-F11 at 0.01µg/mL.

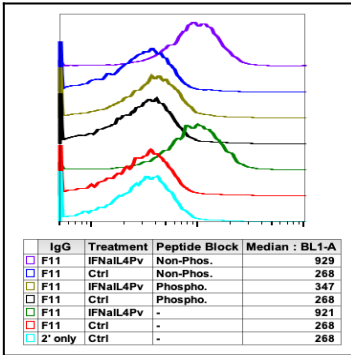


Fig-3: Peptide blocking flow cytometric analysis of Jurkat cells secondary antibody only negative control (light blue) or untreated (red) or treated with IFNα + IL-4 + pervanadate (green) or untreated and blocked with phospho-peptide (black) or treated and blocked with phospho peptide (gold) or untreated and blocked with non-phospho peptide (dark blue) or treated and blocked with non-phospho peptide (purple) using Phospho-Jak1 (Tyr1022/1023) antibody Jak1Y10221023-F11 at 0.001µg/mL.