

12-4346: Phospho-Jak3 (Tyr980/981) (Clone: E10) rabbit mAb

Clonality :	Monoclonal
Clone Name :	JAK3Y980981-E10
Application :	FACS,WB
Reactivity :	Human
Gene :	JAK3
Gene ID :	3718
Uniprot ID :	P52333
Format :	Purified
Alternative Name :	Janus Kinase 3, Janus kinase family of tyrosine kinase, JAKL, LJAK, L-JAK, JAK3-HUMAN,
Isotype :	Rabbit IgG1k
Immunogen Information :	A synthetic phospho-peptide corresponding to residues surrounding Tyr980/981 of human Jak3

Description

Members of the Janus family of tyrosine kinases (Jak1, Jak2, Jak3, and Tyk2) transmit information from extracellular chemical signals to the nucleus resulting DNA transcription (1). Binding of ligands including cytokines to their specific transmembrane receptors activate associated JAKs. Subsequently activated JAKs (Janus kinases) phosphorylate tyrosine residues on the receptor, creating docking sites for latent STAT proteins (Signal Transducer and Activator of Transcription). After recruitment of STAT to the receptor, they are also phosphorylated by JAKs. Activated STATs migrate to the nucleus of the cell and promote gene transcription or induction.(2-4). In mammals the JAK/STAT family consists of four JAK members, JAK1, JAK2, JAK3 and TYK2 and seven STAT members, STAT1, STAT2, STAT3, STAT4, STAT5a, TAT5b, STAT6. The JAKs are activated by different receptors and have, therefore, distinct in vivo roles. Jak3 is mainly expressed in B and T lymphocytes and is required for lymphocyte function and development. Jak3 is phosphorylated in multiple sites including Tyr980, Tyr 981.

Product Info

Amount :	20 µl / 200 µl
Content :	1X PBS, 0.02% NaN3, 50% Glycerol, 0.1% BSA
Storage condition :	Store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

1µg/mL - 0.001µg/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)

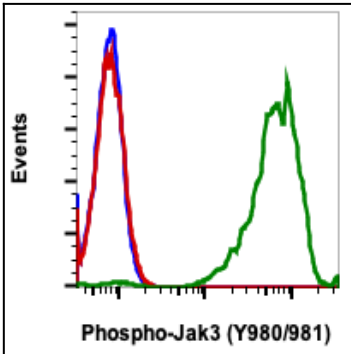


Fig-1: Flow cytometric analysis of Ramos secondary antibody only negative control (blue) or untreated (red) or treated with pervanadate (green) using phospho-Jak3 (Tyr980/981) antibody JAK3Y980981-E10, 0.01 µg/mL.

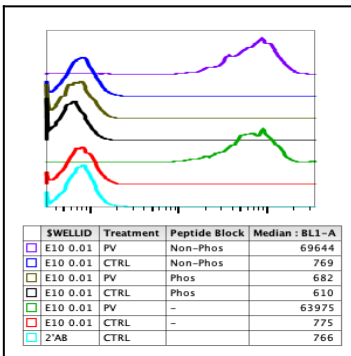


Fig 2 : Peptide blocking flow cytometric analysis of Ramos cells secondary antibody only negative control (light blue) or untreated (red) or treated with pervanadate (green) or untreated and blocked with phospho-peptide (black) or treated and blocked with phospho peptide (gold) or untreated and blocked with non-phospho peptide (dark blue) or treated and blocked with non-phospho peptide (purple) using Phospho-Jak3 (Tyr980/981) antibody JAK3Y980981-E10 at 0.01 µg/mL.

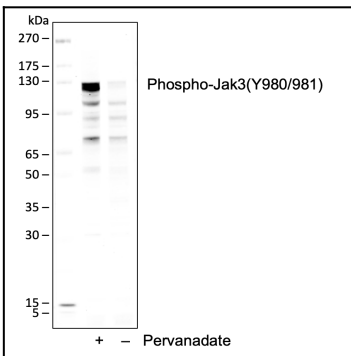


Fig-3: Western blot analysis of COS7 cell extract, untreated or treated with pervanadate using Phospho-Jak3 (Tyr980/981) antibody JAK3Y980981-E10 at 0.1 µg/mL.