

JAK1 (Ab-1022) Antibody #21119

## Catalog Number: 21119-1, 21119-2

Amount: 50µg/50µl, 100µg/100µl

Swiss-Prot No. : P23458

**Form of Antibody:** Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl,0.02% sodium azide and 50% glycerol.

Storage/Stability: Store at -20°C/1 year

**Immunogen:** The antiserum was produced against synthesized non-phosphopeptide derived from human JAK2 around the phosphorylation site of tyrosine 1022 (K-E- $Y^{P}$ -Y-T).

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Specificity/Sensitivity: JAK1 (Ab-1022) antibody detects endogenous levels of total JAK1 protein.

Reactivity: Human,Mouse,Rat

## **Applications:**

Predicted MW: 130kd WB:1:500~1:1000 IHC:1:50~1:100



Peptide - + Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue, using JAK1 (Ab-1022) antibody (#21119).



Western blot analysis of extracts from MCF7 cells using JAK1 (Ab-1022) antibody (#21119).

## Background :

Janus kinase 1 (JAK1), is a member of a new class of protein-tyrosine kinases (PTK) characterized by the presence of a second phosphotransferase-related domain immediately N-terminal to the PTK domain. The second phosphotransferase domain bears all the hallmarks of a protein kinase, although its structure differs significantly from that of the PTK and threonine/serine kinase family members. JAK1 is a large, widely expressed membrane-associated phosphoprotein. JAK1 is involved in the interferon-alpha/beta and -gamma signal transduction pathways. The reciprocal interdependence between JAK1 and TYK2 activities in the interferon-alpha pathway, and between JAK1 and JAK2 in the interferon-gamma pathway, may reflect a requirement for these kinases in the correct assembly of interferon receptor complexes. These kinases couple cytokine ligand binding to tyrosine phosphorylation of various known signaling proteins and of a unique family of transcription factors termed the signal transducers and activators of transcription, or STATs.

## **References:**

Zheng H, et al.(2005)Mol Cell Proteomics. 4(6):721-730. Wang R, et al.(2003) Arch Biochem Biophys. 410(1): 7-15.