



# JAK2 (phospho Tyr570) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-14359
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	JAK2
<b>Protein Name</b>	Tyrosine-protein kinase JAK2
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human JAK2 around the phosphorylation site of Tyr570. AA range:541-590
<b>Specificity</b>	Phospho-JAK2 (Y570) Polyclonal Antibody detects endogenous levels of JAK2 protein only when phosphorylated at Y570.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	JAK2; Tyrosine-protein kinase JAK2; Janus kinase 2; JAK-2
<b>Observed Band</b>	130kD
<b>Cell Pathway</b>	Endomembrane system ; Peripheral membrane protein . Cytoplasm . Nucleus .
<b>Tissue Specificity</b>	Ubiquitously expressed throughout most tissues.
<b>Function</b>	catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,disease:Chromosomal aberrations involving JAK2 are found in both chronic and acute forms of eosinophilic, lymphoblastic and myeloid leukemia. Translocation t(8;9)(p22;p24) with PCM1 links the protein kinase domain of JAK2 to the major portion of PCM1. Translocation t(9;12)(p24;p13) with ETV6.,disease:Defects in JAK2 are a cause of acute myelogenous leukemia (AML) [MIM:601626]. AML is a malignant disease in which hematopoietic precursors are arrested in an early stage of development.,disease:Defects in JAK2 are a cause of susceptibility to Budd-Chiari syndrome [MIM:600880]. Budd-Chiari syndrome is a spectrum of disease states, including anatomic abnormalities and hypercoagulable disorders, resulting in hepatic venous outflow occlusion. Clinical manifestations observed in the majority of patients incl
<b>Background</b>	This gene product is a protein tyrosine kinase involved in a specific subset of cytokine receptor signaling pathways. It has been found to be constitutively



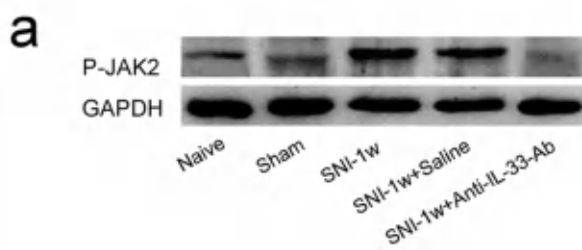
associated with the prolactin receptor and is required for responses to gamma interferon. Mice that do not express an active protein for this gene exhibit embryonic lethality associated with the absence of definitive erythropoiesis. [provided by RefSeq, Jul 2008],

**matters needing attention**

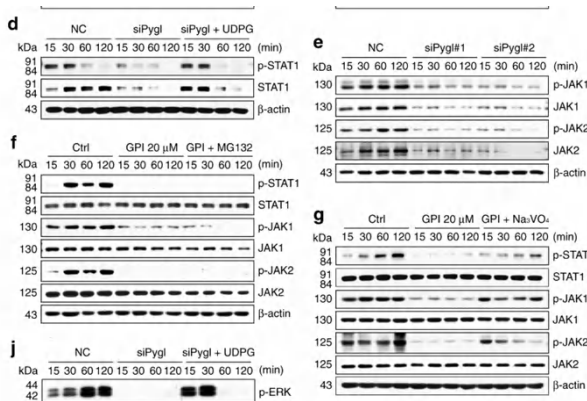
Avoid repeated freezing and thawing!

**Usage suggestions**

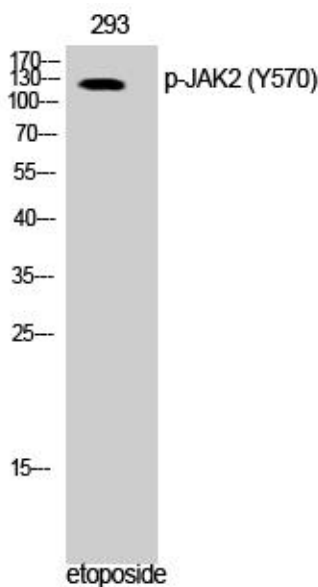
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

**Products Images**


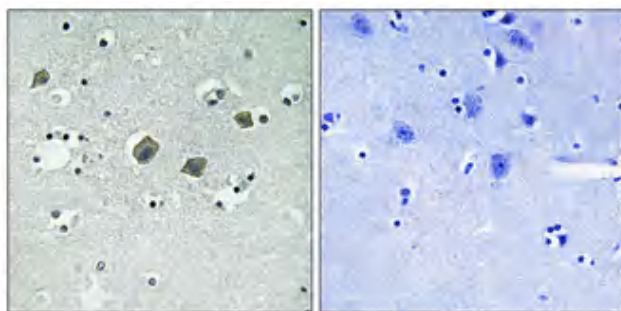
Li, HN., Yang, QQ., Wang, WT. et al. Red nucleus IL-33 facilitates the early development of mononeuropathic pain in male rats by inducing TNF- $\alpha$  through activating ERK, p38 MAPK, and JAK2/STAT3. *J Neuroinflammation* 18, 150 (2021).



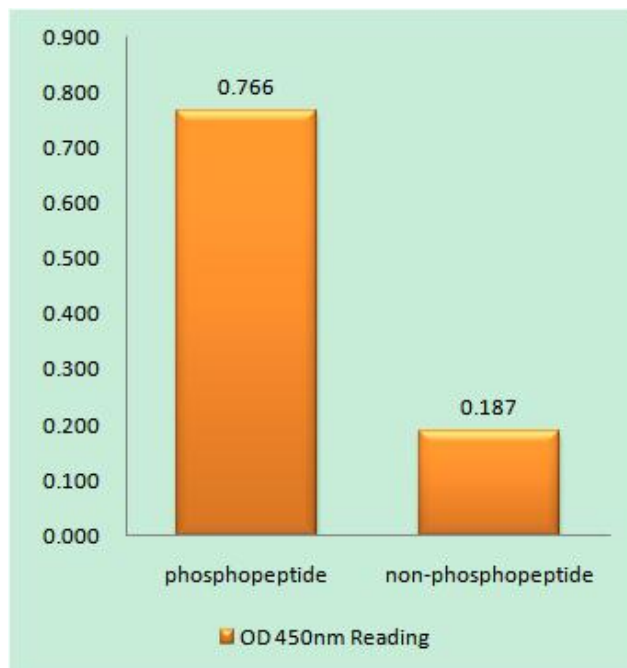
Ma, J., Wei, K., Liu, J. et al. Glycogen metabolism regulates macrophage-mediated acute inflammatory responses. *Nat Commun* 11, 1769 (2020).



Western Blot analysis of 293 cells using Phospho-JAK2 (Y570) Polyclonal Antibody



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtained from antibody was pre-absorbed by immunogen peptide.



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using JAK2 (Phospho-Tyr570) Antibody