

# JAK1 (phospho Tyr1022) Polyclonal Antibody

Catalog # AP67086

## **Product Information**

Application	WB, IHC-P, IF
Primary Accession	<u>P23458</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	133277

#### **Additional Information**

Gene ID	3716
Other Names	JAK1; JAK1A; JAK1B; Tyrosine-protein kinase JAK1; Janus kinase 1; JAK-1
Dilution	WB~~1:1000 IHC-P~~N/A IF~~IF: 1:50-200 Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

#### **Protein Information**

Name Synonyms	JAK1 JAK1A, JAK1B
Function	Tyrosine kinase of the non-receptor type, involved in the IFN-alpha/beta/gamma signal pathway (PubMed: <u>16239216</u> , PubMed: <u>28111307</u> , PubMed: <u>32750333</u> , PubMed: <u>7615558</u> , PubMed: <u>8232552</u> ). Kinase partner for the interleukin (IL)-2 receptor (PubMed: <u>11909529</u> ) as well as interleukin (IL)-10 receptor (PubMed: <u>12133952</u> ). Kinase partner for the type I interferon receptor IFNAR2 (PubMed: <u>16239216</u> , PubMed: <u>28111307</u> , PubMed: <u>32750333</u> , PubMed: <u>7615558</u> , PubMed: <u>8232552</u> ). In response to interferon-binding to IFNAR1-IFNAR2 heterodimer, phosphorylates and activates its binding partner IFNAR2, creating docking sites for STAT proteins (PubMed: <u>7759950</u> ). Directly phosphorylates STAT proteins but also activates STAT signaling through the transactivation of other JAK kinases associated with signaling receptors (PubMed: <u>16239216</u> , PubMed: <u>32750333</u> , PubMed: <u>8232552</u> ).
Cellular Location	Endomembrane system; Peripheral membrane protein. Note=Wholly

intracellular, possibly membrane associated

#### **Tissue Location**

Expressed at higher levels in primary colon tumors than in normal colon tissue. The expression level in metastatic colon tumors is comparable to the expression level in normal colon tissue

## Background

Tyrosine kinase of the non-receptor type, involved in the IFN-alpha/beta/gamma signal pathway (PubMed:<u>7615558</u>). Kinase partner for the interleukin (IL)-2 receptor (PubMed:<u>11909529</u>) as well as interleukin (IL)-10 receptor (PubMed:<u>12133952</u>).

#### Images



Immunofluorescence analysis of mouse-liver tissue. 1,JAK1 (phospho Tyr1022) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

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Immunohistochemical analysis of paraffin-embedded Human-colon tissue. 1,JAK1 (phospho Tyr1022) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

Immunohistochemical analysis of paraffin-embedded Human-liver tissue. 1,JAK1 (phospho Tyr1022) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

Immunohistochemical analysis of paraffin-embedded Human-liver-cancer tissue. 1,JAK1 (phospho Tyr1022) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

Immunohistochemical analysis of paraffin-embedded Human-lung tissue. 1,JAK1 (phospho Tyr1022) Polyclonal



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Immunohistochemical analysis of paraffin-embedded Human-lung-cancer tissue. 1,JAK1 (phospho Tyr1022) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

Immunohistochemical analysis of paraffin-embedded Human-stomach-cancer tissue. 1,JAK1 (phospho Tyr1022) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

Immunohistochemical analysis of paraffin-embedded Human-Appendix tissue. 1,JAK1 (phospho Tyr1022) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

Immunohistochemical analysis of paraffin-embedded Rat-lung tissue. 1,JAK1 (phospho Tyr1022) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,JAK1 (phospho Tyr1022) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

Immunohistochemical analysis of paraffin-embedded Rat-brain tissue. 1,JAK1 (phospho Tyr1022) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control



Immunohistochemical analysis of paraffin-embedded Rat-spleen tissue. 1,JAK1 (phospho Tyr1022) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

Immunohistochemical analysis of paraffin-embedded Mouse-heart tissue. 1,JAK1 (phospho Tyr1022) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

Immunohistochemical analysis of paraffin-embedded Mouse-liver tissue. 1,JAK1 (phospho Tyr1022) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

Immunohistochemical analysis of paraffin-embedded Mouse-colon tissue. 1,JAK1 (phospho Tyr1022) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

Immunohistochemical analysis of paraffin-embedded Mouse-lung tissue. 1,JAK1 (phospho Tyr1022) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

Immunohistochemical analysis of paraffin-embedded Mouse-kidney tissue. 1,JAK1 (phospho Tyr1022) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control



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Immunohistochemical analysis of paraffin-embedded Mouse-spleen tissue. 1,JAK1 (phospho Tyr1022) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

Western Blot analysis of various cells using Phospho-JAK1 (Y1022) Polyclonal Antibody diluted at 1 : 500

Western Blot analysis of A549 cells using Phospho-JAK1 (Y1022) Polyclonal Antibody diluted at 1 : 500

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.