

Datasheet for ABIN681013
anti-JAK3 antibody (AA 601-700)[Go to Product page](#)

2 Images

1 Publication

Overview

Quantity:	100 µL
Target:	JAK3
Binding Specificity:	AA 601-700
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This JAK3 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Flow Cytometry (FACS), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human Jak3
Isotype:	IgG
Specificity:	This has 85 % sequence similarity with JAK1 and may cross-react.
Cross-Reactivity:	Human, Mouse
Predicted Reactivity:	Rat,Dog,Cow,Pig,Horse
Purification:	Purified by Protein A.

Target Details

Target:	JAK3
Alternative Name:	Jak3 (JAK3 Products)
Background:	<p>Synonyms: JAKL, LJAK, JAK-3, L-JAK, JAK3_HUMAN, Tyrosine-protein kinase JAK3, Janus kinase 3, Leukocyte janus kinase, JAK3</p> <p>Background: Non-receptor tyrosine kinase involved in various processes such as cell growth, development, or differentiation. Mediates essential signaling events in both innate and adaptive immunity and plays a crucial role in hematopoiesis during T-cells development. In the cytoplasm, plays a pivotal role in signal transduction via its association with type I receptors sharing the common subunit gamma such as IL2R, IL4R, IL7R, IL9R, IL15R and IL21R. Following ligand binding to cell surface receptors, phosphorylates specific tyrosine residues on the cytoplasmic tails of the receptor, creating docking sites for STATs proteins. Subsequently, phosphorylates the STATs proteins once they are recruited to the receptor. Phosphorylated STATs then form homodimer or heterodimers and translocate to the nucleus to activate gene transcription. For example, upon IL2R activation by IL2, JAK1 and JAK3 Molecules bind to IL2R beta (IL2RB) and gamma chain (IL2RG) subunits inducing the tyrosine phosphorylation of both receptor subunits on their cytoplasmic domain. Then, STAT5A AND STAT5B are recruited, phosphorylated and activated by JAK1 and JAK3. Once activated, dimerized STAT5 translocates to the nucleus and promotes the transcription of specific target genes in a cytokine-specific fashion.</p>
Gene ID:	3718
UniProt:	P52333
Pathways:	JAK-STAT Signaling , RTK Signaling , Response to Growth Hormone Stimulus , Regulation of Leukocyte Mediated Immunity , Production of Molecular Mediator of Immune Response , Protein targeting to Nucleus , Activated T Cell Proliferation , Unfolded Protein Response

Application Details

Application Notes:	WB 1:300-5000
	ELISA 1:500-1000
	FCM 1:20-100
	IHC-P 1:200-400
	IHC-F 1:100-500
	IF(IHC-P) 1:50-200
	IF(IHC-F) 1:50-200

Application Details

IF(ICC) 1:50-200

Restrictions: For Research Use only

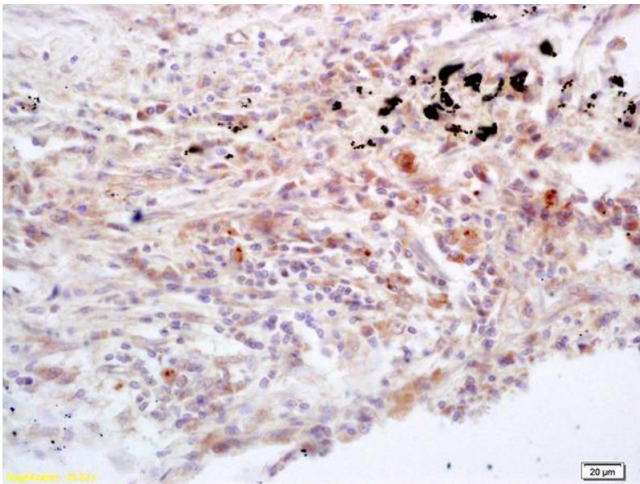
Handling

Format:	Liquid
Concentration:	1 µg/µL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Publications

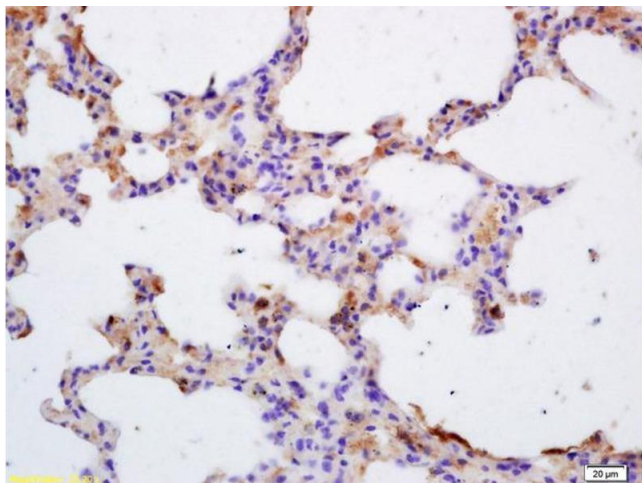
Product cited in: Zhang, Liu, Li, Wang, Li, Sun: "Jak3 is involved in CCR7-dependent migration and invasion in metastatic squamous cell carcinoma of the head and neck." in: **Oncology letters**, Vol. 13, Issue 5, pp. 3191-3197, (2017) ([PubMed](#)).

Images



Immunohistochemistry

Image 1. Formalin-fixed and paraffin embedded human lung carcinoma labeled with Rabbit Anti Jak3 Polyclonal Antibody, Unconjugated (ABIN681013) at 1:200 followed by conjugation to the secondary antibody and DAB staining



Immunohistochemistry

Image 2. Formalin-fixed and paraffin embedded mouse lung labeled with Rabbit Anti Jak3 Polyclonal Antibody, Unconjugated (ABIN681013) at 1:200 followed by conjugation to the secondary antibody and DAB staining