

Datasheet for ABIN7180037
anti-JAK3 antibody (Tyr785)[Go to Product page](#)

2 Images

Overview

Quantity:	100 µL
Target:	JAK3
Binding Specificity:	Tyr785
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This JAK3 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC)

Product Details

Immunogen:	Synthesized non-phosphopeptide derived from Human JAK3 around the phosphorylation site of tyrosine 785 (S-D-Y(p)-E-L).
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Purification:	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Target Details

Target:	JAK3
Alternative Name:	JAK3 (JAK3 Products)

Target Details

Background: 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.

Kawamura M., Proc. Natl. Acad. Sci. U.S.A. 91:6374-6378(1994).

Lai K.S., J. Biol. Chem. 270:25028-25036(1995).

Grimwood J., Nature 428:529-535(2004).

Aliases: EC 2.7.10.2 antibody, JAK 3 antibody, JAK L antibody, JAK-3 antibody, Jak3 antibody, JAK3 HUMAN antibody, JAK3_HUMAN antibody, JAKL antibody, Janus kinase 3 (a protein tyrosine kinase, leukocyte) antibody, Janus kinase 3 antibody, Janus Kinase3 antibody, L JAK antibody, L-JAK antibody, Leukocyte janus kinase antibody, LJAK antibody, Protein tyrosine kinase leukocyte antibody, Tyrosine protein kinase JAK3 antibody, Tyrosine-protein kinase JAK3 antibody

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

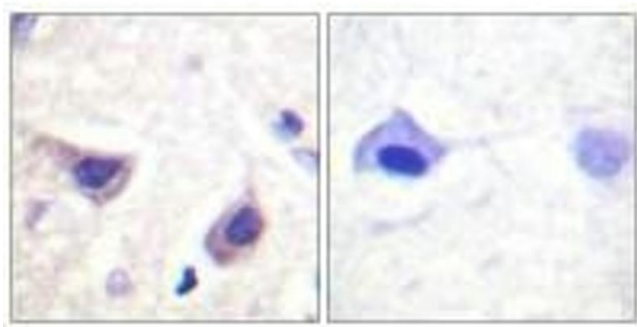
Application Notes: WB:1:500-1:3000, IHC:1:50-1:100,

Restrictions: For Research Use only

Handling

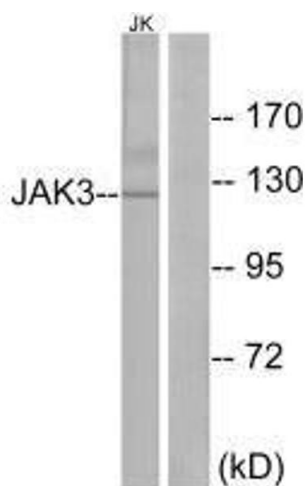
Format:	Liquid
Buffer:	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



Immunohistochemistry

Image 1. Immunohistochemistry analysis of paraffin-embedded human brain tissue using JAK3 (Ab-785) antibody.



Western Blotting

Image 2. Western blot analysis of extracts from Jurkat cells, using JAK3 (Ab-785) antibody.