

Datasheet for ABIN5714372

JAK3 Protein (AA 818-110) (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	100 µg
Target:	JAK3
Protein Characteristics:	AA 818-110
Origin:	Mouse
Source:	Yeast
Protein Type:	Recombinant
Purification tag / Conjugate:	This JAK3 protein is labelled with His tag.
Application:	SDS-PAGE (SDS)

Product Details

Sequence:	LKYISLLGKG NFGSVELCRY DPLGDNTGPL VAVKQLQHSG PDQQRDFQRE IQILKALHSD FIVKYRGVSY GPGRQSLRLV MEYLPSCGLR DFLQRHRARL HTDRLLLFQW QICKGMEYLG ARRCVHRDLA ARNILVESEA HVKIADFGLA KLLPLGKDYV VVREPGQSPI FWYAPESLSD NIFSRQSDVW SFGVVLVELF TYCDKSCSPS AEFLRMMGPE REGPPLCRLL ELLAEGRRLP PPPTCPTEVQ ELMQLCWAPS PHDRPAFGTL SPQLDALWRG RPG
Purification:	SDS-PAGE
Purity:	> 90 %

Target Details

Target:	JAK3
Alternative Name:	JAK3 (JAK3 Products)

Target Details

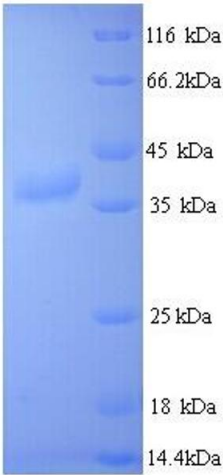
Background:	Non-receptor tyrosine kinase involved in various processes such as cell growth, development, or differentiation. Mediates essential signaling events in both innate and adaptive immunity and plays a crucial role in hematopoiesis during T-cells development. In the cytoplasm, plays a pivotal 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.
Molecular Weight:	34.2 kDa
UniProt:	Q62137
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:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	0.1-2 mg/mL
Buffer:	20 mM Tris-HCl based buffer, pH 8.0
Storage:	-80 °C, 4 °C, -20 °C
Storage Comment:	Store at -20°C, for extended storage, conserve at -20°C or -80°C. Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.



SDS-PAGE

Image 1.