

## Product Datasheet

### Jak3 Polyclonal Antibody GRP492

#### Description

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.

#### Species/Host

Rabbit

#### Reactivity

Human, Mouse, Rat

#### Conjugation

Unconjugated

#### Tested Applications

IHC-P, WB

#### Immunogen

KLH conjugated synthetic peptide derived from human Jak3 (public\_immunogen\_range: 610-660/1124)

#### Form/Appearance

Aqueous buffered solution containing 1% BSA, 50% glycerol and 0.09% sodium azide.

#### Concentration

1ug/ul

#### Storage

Store at -20°C for 12 months.

#### Note

For research use only.

#### Isotype

IgG

#### Clonality

Polyclonal

#### Purity

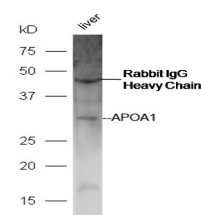
Purified by Protein A.

#### Uniprot ID

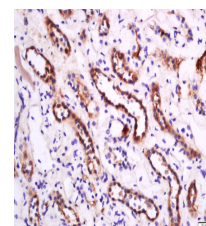
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#### Entrez

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WB of GRP492



IHC-P of GRP492