

Rabbit Anti-JAK2 [MD349R]: RM0065, RM0065RTU7

Intended Use: For Research Use Only

Description: JAK2 is a member of the Janus family of tyrosine kinases (JAK1, JAK2, JAK3, and TYK2), which are activated by ligands binding to a number of associated cytokine receptors and become autophosphorylated and phosphorylate their associated receptors to provide multiple binding sites for signaling proteins. These associated signaling proteins, such as Stats, Shc, insulin receptor substrates, and focal adhesion kinase (FAK), typically contain SH2 or other phospho-tyrosine-binding domains. JAK2 is required for the IFN gamma-receptor complex initiation and JAK1 functions as an amplifier. Some studies have suggested that the role of JAK2 might be performed by Tyk2 and JAK3, if they were positioned correctly within the IFN gamma-receptor complex. Mutations affecting JAK2 can cause Budd-Chiari syndrome, Polycythemia vera, Thrombocythemia 3, myelofibrosis, or acute myelogenous leukemia.

Specifications

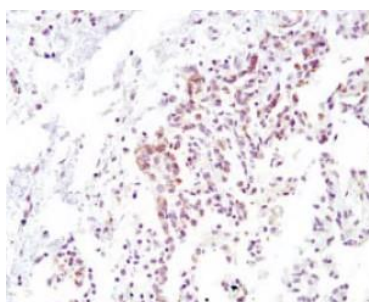
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|---------------|--|
| Clone: | MD349R |
| Source: | Rabbit |
| Isotype: | IgG |
| Reactivity: | Human, mouse, rat |
| Immunogen: | Synthetic peptide of PRO841 of human JAK2 |
| Localization: | Cytoplasm, nucleus |
| Formulation: | Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN ₃) |
| Storage: | Store at 2°- 8°C |
| Applications: | IHC, IP, WB |
| Package: | |

| Description | Catalog No. | Size |
|----------------------------|-------------|------|
| JAK2 [MD349R] Concentrated | RM0065 | 1 ml |
| JAK2 [MD349R] Prediluted | RM0065RTU7 | 7 ml |

IHC Procedure*

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|---------------------------|---|
| Positive Control Tissue: | Kidney, lung carcinoma, breast carcinoma |
| Concentrated Dilution: | 20-200 |
| Pretreatment: | Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C |
| Incubation Time and Temp: | 30-60 minutes @ RT |
| Detection: | Refer to the detection system manual |

* Result should be confirmed by an established diagnostic procedure.



FFPE human lung carcinoma stained with anti-JAK2 using DAB

References:

1. Carboplatin-Induced Thrombocytopenia through JAK2 Downregulation, S-Phase Cell Cycle Arrest and Apoptosis in Megakaryocy. Yi-hong Wu, et. al. Int J Mol Sci. 2022.
2. JAK2-IGF1 axis in osteoclasts regulates postnatal growth in mice. David W Dodington, et. al. JCI Insight. 2021.