bsm-54138R

[Primary Antibody]

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JAK1 Recombinant Rabbit mAb

DATASHEET -

Host: Rabbit Isotype: IgG Clonality: Recombinant CloneNo.: 2B12 **GenelD: 3716 SWISS:** P23458

Target: JAK1

Immunogen: A synthesized peptide derived from human JAK1: 625-660.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50%

Shipped at 4°C. Store at -20°C for one year. Avoid repeated

freeze/thaw cycles.

Background: Janus kinase 1 (JAK1) is a member of a new class of non-receptor protein-tyrosine kinases (PTK) characterized by the presence of a second phosphotransferase-related domain immediately Nterminal to the PTK domain. The second phosphotransferase domain bears all the hallmarks of a protein kinase, although its structure differs significantly from that of the PTK and threonine/serine kinase family members. JAK1 is a large, widely expressed membrane-associated phosphoprotein. It is involved in the interferon-alpha/beta and -gamma signal transduction pathways. The reciprocal interdependence between JAK1 and TYK2 activities in the interferon-alpha pathway, and between JAK1 and JAK2 in the interferon-gamma pathway, may reflect a requirement for these kinases in the correct assembly of interferon recpeptor complexes. These kinases couple cytokine ligand binding to tyrosine phosphorylation of various known signaling proteins and a unique family of transcription factors termed the signal transducers and activators of transcription, or STATs.

Applications: WB (1:500-1000)

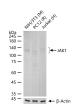
IHC-P (1:100-500) IHC-F (1:100-500) **IF** (1:100-500) Flow-Cyt (1:50-100)

Reactivity: Human, Mouse, Rat

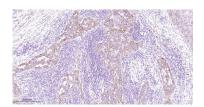
Predicted MW.: 133 kDa

Subcellular Location: Cytoplasm

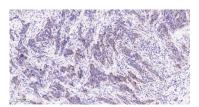
VALIDATION IMAGES



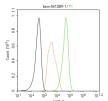
25 ug total protein per lane of various lysates (see on figure) probed with JAK1 monoclonal antibody, unconjugated (bsm-54138R) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



Paraformaldehyde-fixed, paraffin embedded Human Breast Cancer: Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Antibody incubation with JAK1 Monoclonal Antibody, Unconjugated(bsm-54138R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.



Paraformaldehyde-fixed, paraffin embedded Human Cervical Cancer: Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with JAK1 Monoclonal Antibody, Unconjugated(bsm-54138R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.



The A431 (H) cells were fixed with 4% PFA (10 min at r.t.) and then permeabilized with 90% icecold methanol for 20 min at -20°C, the cells then

were incubated in 5%BSA to block non-specific protein-protein interactions (30 min at r.t.), followed by secondary antibody incubation for 40 min at room temperature. Primary Antibody (green):Rabbit Anti-JAK1 antibody (bsm-54138R,1:100); Isotype Control (orange): Rabbit IgG (bs-0295P). Blank control (black): PBS. Acquisition of 20,000 events was performed.

- SELECTED CITATIONS -

- [IF=17.4] Hui Yan. et al. Elaboration a ROS-responsive darutigenol prodrug nanoassemblies for inflammatory arthritis treatment. NANO TODAY. 2024 Apr;55:102220 WB ;Mouse. 10.1016/j.nantod.2024.102220
- [IF=7.5] Junchao Wu. et al. JAK1/JAK2 degraders based on PROTAC for topical treatment of atopic dermatitis. BIOMED PHARMACOTHER. 2024 Feb;171:116167 WB,IHC; Mouse. 38262152
- [IF=8.3] Yifan Zhang. et al. Yuzhi Zhixue Granules regulate the JAK/STAT pathway to affect T-cell differentiation in the colon of ulcerative colitis. PHYTOMEDICINE. 2025 Aug;:157198 WB ;MOUSE. 40907405
- [IF=2.5] Jie Luo. et al. Xin Sheng Hua Granule ameliorate chemotherapy-induced blood deficiency syndrome through ihibiting JAK1/STAT1 pathway activation. FITOTERAPIA. 2025 Jun;183:106571 IHC,WB; Mouse. 40316148