Phospho-JAK1 (Tyr1022, Tyr1023) Recombinant Rabbit Monoclonal Antibody (59H4L5)

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse
Published Species	Rat
Host/Isotype	Rabbit / IgG
Expression system	Expi293
Class	Recombinant Monoclonal
Type	Antibody
Clone	59H4L5
Conjugate	Unconjugated
Immunogen	A peptide corresponding to amino acids 1030-1039 of P23458. This site is commonly referred to as pY1022/pY1023 in the literature.
Form	Liquid
Concentration	0.5 mg/mL
Purification	Protein A
Storage buffer	PBS
Contains	0.09% sodium azide
Storage conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_2532272

Applications	Tested Dilution	Publications
Western Blot (WB)	0.5-2 µg/mL	1 Publication
Immunocytochemistry (ICC/IF)	1:100-1:500	-
ChIP assay (ChIP)	1 µL	-

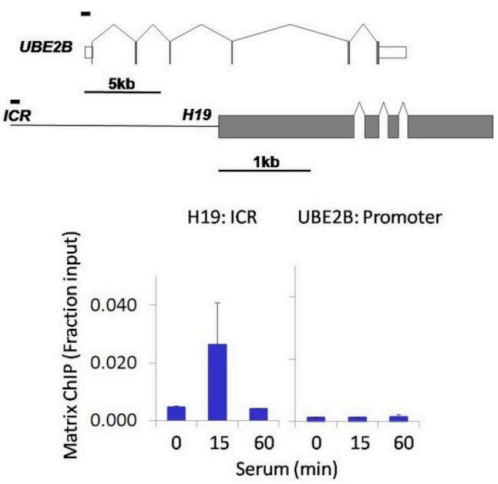
Product Specific Information

This antibody is predicted to react with mouse, rat, chimpanzee, Rhesus monkey, bovine, canine, porcine, equine, Xenopus and zebrafish based on sequence homology.

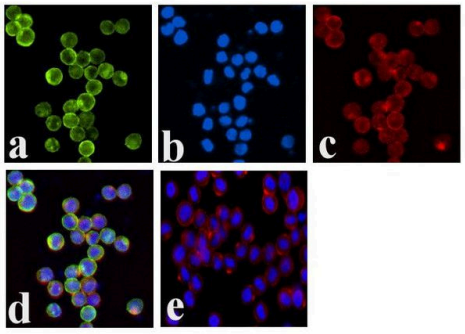
Intact IgG appears on a non-reducing gel as ~150 kDa band and upon reduction generating a ~25 kDa light chain band and a ~50 kDa heavy chain.

Recombinant rabbit monoclonal antibodies are produced using in vitro expression systems. The expression systems are developed by cloning in the specific antibody DNA sequences from immunoreactive rabbits. Then, individual clones are screened to select the best candidates for production. The advantages of using recombinant rabbit monoclonal antibodies include: better specificity and sensitivity, lot-to-lot consistency, animal origin-free formulations, and broader immunoreactivity to diverse targets due to larger rabbit immune repertoire.

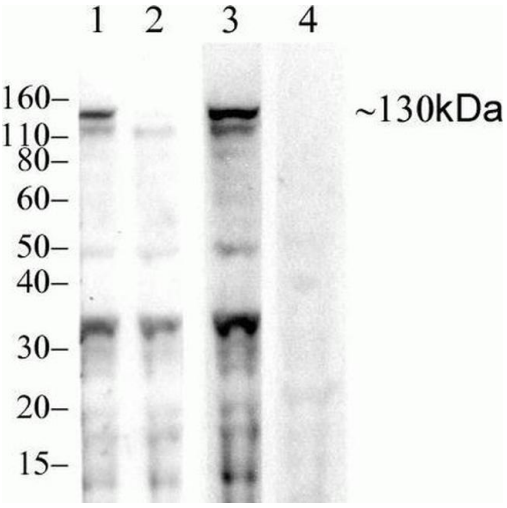
Product Images For Phospho-JAK1 (Tyr1022, Tyr1023) Recombinant Rabbit Monoclonal Antibody (59H4L5)



Phospho-JAK1 (Tyr1022, Tyr1023) Antibody (700028) in ChIP
Chromatin immunoprecipitation analysis of Phospho-JAK1 (pTyr1022+1023) was performed using cross-linked chromatin from 1 x 10^6 HCT116 human colon carcinoma cells treated with serum for 0, 15, and 60 minutes. Immunoprecipitation was performed using a multiplex microplate Matrix ChIP assay (see reference for Matrix ChIP protocol: http://www.ncbi.nlm.nih.gov /pubmed/22098709) with 1.0 µL/100 µL well volume of a Phospho-JAK1 (pTyr1022+1023) rabbit monoclonal antibody (Product # 700028). Chromatin aliquots from ~1 x 10^5 cells were used per ChIP pull-down. Quantitative PCR data were done in quadruplicate using 1 µL of eluted DNA in 2 µL SYBR real-time PCR reactions containing primers to amplify the promoter region of human UBE2B, or the imprinting control region (ICR) of the human H19 locus. PCR calibration curves were generated for each primer pair from a dilution series of sheared total genomic DNA. Quantitation of immunoprecipitated chromatin is presented as signal relative to the total amount of input chromatin. Results represent the mean +/- SEM for three experiments. A schematic representation of the human UBE2B and H19 loci are shown above the data where boxes represent exons (grey boxes = translated regions, white boxes = untranslated regions), the zigzag lines represent introns, and the straight line represents upstream sequence. Regions amplified by UBE2B and H19 primers are represented by black bars. Data courtesy of the Innovators Program.



Phospho-JAK1 (Tyr1022, Tyr1023) Antibody (700028) in ICC/IF
Immunofluorescence analysis of JAK1 (pY1022/1023) was done on 70% confluent log phase COLO 205 cells. The cells were fixed with 4% paraformaldehyde for 15 minutes, permeabilized with 0.25% Triton X-100 for 10 minutes, and blocked with 5% BSA for 1 hour at room temperature. The cells were labeled with JAK1 (pY1022/1023) Recombinant Rabbit Monoclonal Antibody (Product # 700028) at 2 µg/mL in 1% BSA and incubated for 3 hours at room temperature and then labeled with Alexa Fluor 488 Goat anti-Rabbit IgG Secondary Antibody (Product # A-11008) at a dilution of 1:400 for 30 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant DAPI (Product # S36938). F-actin (Panel c: red) was stained with Alexa Fluor 594 Phalloidin (Product # A12381). Panel d is a merged image showing membrane localization. Panel e shows no primary antibody control. The images were captured at 20X magnification.



Phospho-JAK1 (Tyr1022, Tyr1023) Antibody (700028) in WB
Western blot analysis of Phospho-JAK1 pTyr1022/1023 in untreated 3T3-L1 lysates (lane 2) or 25 ng/mL LIF-stimulated 3T3-L1 lysates (lane 1) using a Phospho-JAK1 pTyr1022/1023 recombinant rabbit monoclonal antibody (Product # 700028) at a dilution of 1 µg/mL.

1 Reference

Western Blot (1)

Inflammopharmacology

Recombinant human erythropoietin and interferon--1b protect against 3-nitropropionic acid-induced neurotoxicity in rats: possible role of JAK /STAT signaling pathway.

"700028 was used in Western Blot to demonstrate the neuroprotective effect of recombinant human erythropoietin and interferon-beta-1b in 3-nitropropionic acid induced neurotoxicity in rats."

Authors: Sayed RH,Ghazy AH,Yammany MFE

Year
2022

Species
Rat

Dilution
1:1000