

Janus Kinase 1 (JAK1) Active Protein | JAK1 active protein

Active Janus Kinase 1 (JAK1)

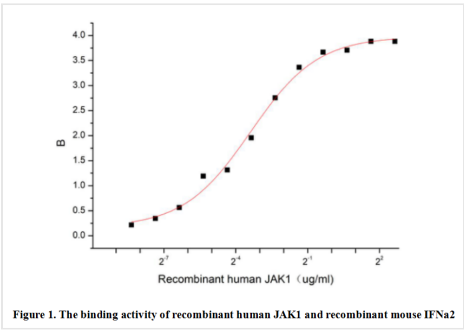
CATALOG # AAA161890	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Janus Kinase 1 (JAK1); Active Janus Kinase 1 (JAK1); Janus Kinase 1; JAK1A; JAK1B; JTK3; Tyrosine-protein kinase JAK14; JAK1 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 95% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	His596-Ile 841
Applicable Applications for JAK1 active protein	Activity Assay, Cell Culture
Species	Human
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	6.2
Research Area	Enzyme & Kinase
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

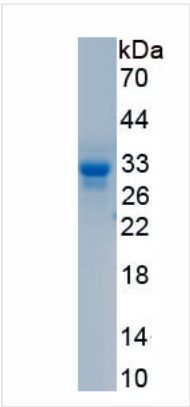


Bioactivity

Janus Kinase 1, also known as JAK1, is a member of the Janus kinase family, which plays a crucial role in various cellular processes, including signal transduction, immune response, and hematopoiesis. It is reported that the binding of JAK1 to IFNα2 plays an important role in immune response and antiviral defense. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human JAK1 and recombinant mouse IFNα2. Briefly, JAK1 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to IFNα2-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-JAK1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37 degree C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 uL stop solution to the wells and read at 450/630 nm immediately. The binding activity of recombinant human JAK1 and recombinant mouse IFNα2 was shown in Figure 1, the EC50 for this effect is 0.1 ug/mL.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for JAK1 active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	102469034
NCBI GeneID	3716
NCBI Accession #	NP_002218.2
NCBI GenBank Nucleotide #	NM_002227.2
UniProt Accession #	P23458; Q59GQ2; Q9UD26
Molecular Weight	133,277 Da
NCBI Official Full Name	tyrosine-protein kinase JAK1
NCBI Official Synonym Full Names	Janus kinase 1
NCBI Official Symbol	JAK1
NCBI Official Synonym Symbols	JTK3; JAK1A; JAK1B
NCBI Protein Information	tyrosine-protein kinase JAK1
UniProt Protein Name	Tyrosine-protein kinase JAK1
UniProt Gene Name	JAK1
UniProt Synonym Gene Names	JAK1A; JAK1B; JAK-1
UniProt Entry Name	JAK1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/janus-kinase-1-jak1/161890>