

JAK2 recombinant protein

Recombinant JAK2 (532-1132) protein

CATALOG # AAA60212	HOST Baculovirus
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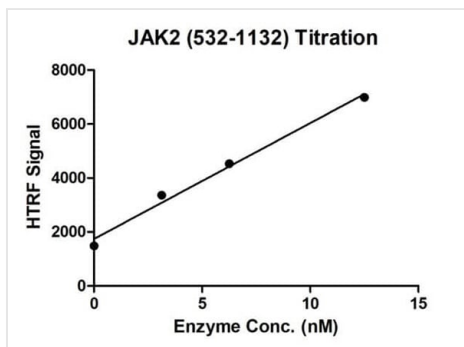
PRODUCT SYNONYMS

JAK2; Recombinant JAK2 (532-1132) protein; Janus Kinase 2; Tyrosine-Protein Kinase JAK2; EC 2.7.10; JAK2 recombinant protein

PRODUCT SPECIFICATIONS

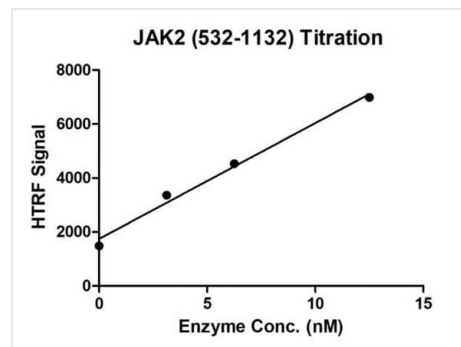
Host	Baculovirus
Form/Format	Recombinant JAK2 (532-1132) protein is supplied in 25mM HEPES-NaOH pH7.5, 300mM NaCl, 10% glycerol, 0.04% Triton X-100 and 0.5mM TCEP.
Protein Species	Human
Tag	DYKDDDDK-Tag
Notes	Recombinant JAK2 (532-1132) protein is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



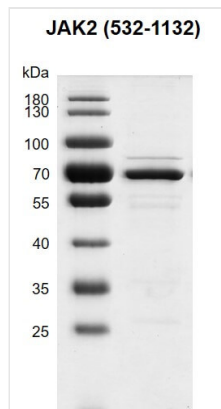
Application Data

HTRF assay for Recombinant JAK2 (532-1132) protein activity 1 μ M TK substrate was incubated with different concentrations of JAK2 (532-1132) protein in a 10 μ l reaction system containing 1 $\times$ Enzymatic Buffer, 5 mM MgCl₂, 1 mM DTT, 5 nM SEB and 100 μ M ATP for 1 hour. The detection reagents were added and incubated with the reactions for 1 hr. All the operations and reactions were performed at room temperature, and HTRF KinASE TK assay was used to detect the enzymatic activity



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SDS-PAGE

Recombinant JAK2 (532-1132) protein gel 10% SDS-PAGE gel with Coomassie blue staining
MW: 71 kDa Purity: >90%

ADDITIONAL INFORMATION

Related Product Information for JAK2 recombinant protein	Short Description: Recombinant JAK2 (532-1132) protein that includes amino acids 532-1132 of human JAK2 protein (accession number NP_004963.1) was expressed in a baculovirus expression system and contains an N-terminal DYKDDDDK-Tag. The molecular weight of the protein is 71 kDa. Recombinant JAK2 (532-1132) protein is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling. Background: JAK2 (Janus Kinase 2), also known as Tyrosine-Protein Kinase JAK2 or JTK10, is a non-receptor tyrosine kinase involved in various processes such as cell growth, development, differentiation or histone modifications. In the cytoplasm, JAK2 plays a pivotal role in signal transduction via its association with type I receptors such as growth hormone (GHR), prolactin (PRLR), leptin (LEPR), erythropoietin (EPOR), thrombopoietin (THPO); or type II receptors including IFN-alpha, IFN-beta, IFN-gamma and multiple interleukins. Following ligand-binding to cell surface receptors, JAK2 can phosphorylate specific tyrosine residues on the cytoplasmic tails of the receptor, creating docking sites for STATs proteins. Then it can subsequently phosphorylate 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. JAK2 signaling is implicated in diverse biological processes such as cell cycle progression, apoptosis, mitotic recombination, genetic instability and alteration of heterochromatin.
Product Categories/Family for JAK2 recombinant protein	Recombinant Proteins ; Kinase

NCBI AND UNIPROT INFORMATION

NCBI GI #	4826776
NCBI GeneID	3717
NCBI Accession #	NP_004963.1
NCBI GenBank Nucleotide #	NM_004972.3
UniProt Accession #	O60674 ; O14636 ; O75297
Molecular Weight	130,674 Da
NCBI Official Full Name	tyrosine-protein kinase JAK2
NCBI Official Synonym Full Names	Janus kinase 2
NCBI Official Symbol	JAK2
NCBI Official Synonym Symbols	JTK10; THCYT3
NCBI Protein Information	tyrosine-protein kinase JAK2; JAK-2; Janus kinase 2 (a protein tyrosine kinase)
UniProt Protein Name	Tyrosine-protein kinase JAK2

UniProt Gene Name	JAK2
UniProt Synonym Gene Names	JAK-2
UniProt Entry Name	JAK2_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/jak2-recombinant-protein-baculovirus/60212>