

Synonym

JAK1, JAK-1, JAK1A, JAK1B, Jak1

Source

Human JAK1, His Tag (JA1-H5547) is expressed from Baculovirus-Insect cells.

It contains AA Ala 561 - Asn 852 (Accession # [P23458-1](#)).

Predicted N-terminus: Met

Molecular Characterization

Poly-his JAK1(Ala 561 - Asn 852)
P23458-1

This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 35.7 kDa. The protein migrates as 30-33 kDa under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

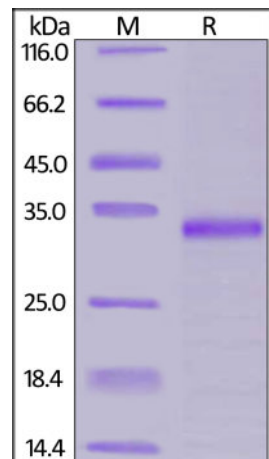
Delivered as bulk protein in a 0.2 µm filtered solution of 50 mM Tris, 500 mM NaCl, 2 mM TCEP, pH8.0 with glycerol as protectant.

Contact us for customized product form or formulation.

Storage*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

Shipping*This product is supplied as sterile liquid solution and shipped frozen with dry ice, please inquire the shipping cost.***SDS-PAGE**

Human JAK1, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Background

JAK1 is a human tyrosine kinase protein essential for signaling for certain type I and type II cytokines. It interacts with the common gamma chain (γ_c) of type I cytokine receptors, to elicit signals from the IL-2 receptor family (e.g. IL-2R, IL-7R, IL-9R and IL-15R), the IL-4 receptor family (e.g. IL-4R and IL-13R), the gp130 receptor family (e.g. IL-6R, IL-11R, LIF-R, OSM-R, cardiotrophin-1 receptor (CT-1R), ciliary neurotrophic factor receptor (CNTF-R), neurotrophin-1 receptor (NNT-1R) and Leptin-R). Jak1 plays a critical role in initiating responses to multiple major cytokine receptor families. Expression of JAK1 in cancer cells enables individual cells to contract, potentially allowing them to escape their tumor and metastasize to other parts of the body

References

- (1) [Anna Usacheva, et al. J Immunol. 2002. 169\(3\):1302-8.](#)
- (2) [Sakatsume M, et al. J Biol Chem. 1995. 270\(29\):17528-34.](#)
- (3) [Gadina M, et al. Curr Opin Immunol. 2001. 13\(3\):363-73.](#)

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.