# Human Tyk2 Protein, His Tag

Catalog # TY2-H5548



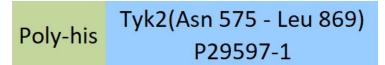
#### Synonym

Tyk2,tyrosine kinase 2

### Source

Human Tyk2 Protein, His Tag(TY2-H5548) is expressed from Baculovirus-Insect cells. It contains AA Asn 575 - Leu 869 (Accession # <u>P29597-1</u>). Predicted N-terminus: His

# **Molecular Characterization**



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

The protein has a calculated MW of 35.2 kDa. The protein migrates as 35 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

### Endotoxin

Less than 1.0 EU per  $\mu$ g by the LAL method.

# Purity

>90% as determined by SDS-PAGE.

### Formulation

Supplied as 0.2  $\mu$ m filtered solution in 50 mM Tris, 150 mM NaCl, 1 mM DTT, PH7.5 with glycerol as protectant.

Contact us for customized product form or formulation.

### Shipping

*This product is supplied and shipped with dry ice, please inquire the shipping cost.* 

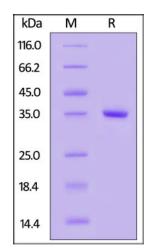
#### Storage

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.

# **SDS-PAGE**



Human Tyk2 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

### Background

Tyk2 was the first member of the JAK family that was described (the other members are JAK1, JAK2, and JAK3). It has been implicated in IFN-α, IL-6, IL-10 and

IL-12 signaling. Tyk2 functions primarily in IL-12 and type I-IFN signaling. Tyk2 deficiency has more dramatic effects in human cells than in mouse cells. However, in addition to IFN- $\alpha$  and - $\beta$  and IL-12 signaling, Tyk2 has major effects on the transduction of IL-23, IL-10, and IL-6 signals. Recently, it has been recognized that IL-12 and IL-23 share ligand and receptor subunits that activate Tyk2. Tyk2 is activated by IL-10, and its deficiency affects the ability to generate and respond to IL-10.

**Clinical and Translational Updates** 





