

## Product datasheet for **TP313878M**

### **JAK1 (NM\_002227) Human Recombinant Protein**

#### Product data:

**Product Type:** Recombinant Proteins  
**Description:** Recombinant protein of human Janus kinase 1 (a protein tyrosine kinase) (JAK1), 100 µg  
**Species:** Human  
**Expression Host:** HEK293T  
**Expression cDNA** >RC213878 representing NM\_002227  
**Clone or AA Sequence:** **Red**=Cloning site **Green**=Tags(s)

MQYLNKEDCNAMAFCAKMRSSKTEVNLEAPEPGVEVIFYLSDREPLRLGSGEYTAEELCIRAAQACRI  
SPLCHNLFALYDENTKLWYAPNRTITVDDKMSLRRLHYRMRFYFTNWHGTNDNEQSVWRHSPKKQKNGYEK  
KKIPDATPLLDASSLEYLFAQQGYDLVKCLAPIRDPKTEQDGHDIENECLGMVLAISHYAMMKMQLPE  
LPKDISYKRYIPETLNKSIRQRNLLTRMRINNFKDFLKEFNKTCIDSSVSTHDLKVYLATLETTLKH  
YGAEIFETSMLLISSENMNWFHSNDGGNVLYEVMVTGNLGIQWRHKPNVVSVEKEKNLKRKKLENKH  
KKDEEKNKIREEWNNSYFPEITHIVIKESVVSINKQDNKKMELKSSHEEALSFVSLVDGYFRLTADAH  
HYLCTDVAPPLIVHNIQNGCHGPICTEYAINKLRQEGSEEGMYVLRWSCDFDNILMTVTCFEKSEQVQG  
AQKQFKNFQIEVQKGRYSLHGSDRSFPSLGDLMShLKKQILRTDNISFMLKRCCQPKPREISNLLVATKK  
AQEWQPVYPMSQLSFDRILKDLVQGEHLGRGTRTHIYSGTLMMDYKDDEGTSEEKIKVILKVLDPShRD  
ISLAFEEAASMMRQVSHKHIVYLYGVCVRDVENIMVEEFVEGGPLDLFMHRKSDVLTTPWKFVAKQLAS  
ALSYLEDKDLVHGNVCTKNLLLAREGIDSECGPFIKLSDPGIPITVLSRQECIERIPWIAPECVEDSKNL  
SVAADKWSFGTTLWEICYNGEIPLKDKTLIEKERFYESRCRPVTPSCKELADLMTRCMNYDPNQRPFFRA  
IMRDINKLEEQNPDIVSEKKPATEVDPTHFEKRFLKRIRDLGEGHFGKVELCRYDPEGDNTGEQVAVKSL  
KPESGGNHIADLKKEIEILRNLYHENIVKYKGICTEDGGNGIKLIMEFLPSGSLKEYLPKNKNKINLKQQ  
LKYAVQICKGMDYLGSRQYVHRDLAARNVLVESEHQVQKIGDFGLTKAIETDKEYYTVKDDRDSPVFWYAP  
ECLMQSKFYIASDVWSFGVTLHELLTYCDS DSSPMALFLKMIGPTHGQMTVTRLVNTLKEGKRLPCPPNC  
PDEVYQLMRKCWEFQPSNRTSFQNLIEGFALLK

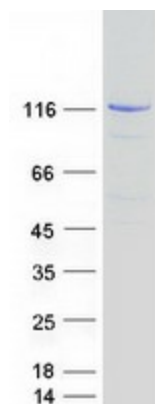
**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Tag:** C-Myc/DDK  
**Predicted MW:** 133.1 kDa  
**Concentration:** >0.05 µg/µL as determined by microplate BCA method  
**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining  
**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol



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<b>Preparation:</b>	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_002218</a>
<b>Locus ID:</b>	3716
<b>UniProt ID:</b>	<a href="#">P23458</a>
<b>RefSeq Size:</b>	5053
<b>Cytogenetics:</b>	1p31.3
<b>RefSeq ORF:</b>	3462
<b>Synonyms:</b>	AIIDE; JAK1A; JAK1B; JTK3
<b>Summary:</b>	This gene encodes a membrane protein that is a member of a class of protein-tyrosine kinases (PTK) characterized by the presence of a second phosphotransferase-related domain immediately N-terminal to the PTK domain. The encoded kinase phosphorylates STAT proteins (signal transducers and activators of transcription) and plays a key role in interferon-alpha/beta, interferon-gamma, and cytokine signal transduction. This gene plays a crucial role in effecting the expression of genes that mediate inflammation, epithelial remodeling, and metastatic cancer progression. This gene is a key component of the interleukin-6 (IL-6)/JAK1/STAT3 immune and inflammation response and is a therapeutic target for alleviating cytokine storms. The kinase activity of this gene is directly inhibited by the suppressor of cytokine signalling 1 (SOCS1) protein. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2020]
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	Jak-STAT signaling pathway, Pancreatic cancer, Pathways in cancer

**Product images:**

Coomassie blue staining of purified JAK1 protein (Cat# [TP313878]). The protein was produced from HEK293T cells transfected with JAK1 cDNA clone (Cat# [RC213878]) using MegaTran 2.0 (Cat# [TT210002]).