

## Product datasheet for **TP313858L**

### STAT1 (NM\_007315) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human signal transducer and activator of transcription 1, 91kDa (STAT1), transcript variant alpha, 1 mg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC213858 representing NM_007315 <span style="color: red;">Red</span> =Cloning site <span style="color: green;">Green</span> =Tags(s)

MSQWYELQQLDSEKFLQVHQLYDDSFMEIRQYLAQWLEKQDWEHAANDVSFATIRFHDLLSQLDDQYSR  
 FSLENNFLLQHNIRKSKRNLQDNFQEDPIQMSMIISCLKEERKILENAQRFNQAQSGNIQSTVMLDKQK  
 ELDSKVRNVKDKVMCIEHEIKSLEDLQDEYDFKCKTLQNHETNGVAKSDQKQEQLLLKMYLMLDNKR  
 KEVHKIIELLNVTELTQNALINDELVEWKRRQQSACIGGPPNACLDQLQNWFTIVAESLQQVRQQLKKL  
 EELEQKYTYEHPITKNKQVLWDRTFSLFQQLIQSSFVVERQPCMPHPQRPLVLKTGVQFTVKLRLLVK  
 LQELNYNLKVKVLFDKDVNERNTVKGFRKFNLGTHTKVMNMEESTNGSLAAEFRHLQLKEQKNAGTRTN  
 EGPLIVTEELHSLSFETQLCQPLVIDLETTSLPVVISNVSQLPSGWASILWYNMLVAEPRNLSFFLTP  
 PCARWAQLSEVLSWQFSSVTKRGLNVDQLNMLGEKLLGPNASPDGLIPWTRFCKENINDKNFPFWLWIES  
 ILELIKHHLLPLWNDGCMGFISKERERALLKDQPGTFLRFSESSREGAITFTWVERSQNGGEPDFHA  
 VEPYTKKELSAVTFPDIIRNYKVMAAENIPENPLKYLPNIDKDHAFGKYYSRPKEAPEPMELDGPKGKG  
 YIKTELISVSEVHPSRLQTTDNLLPMSPEEFDEVSRIVGSVEFDSMMNTV

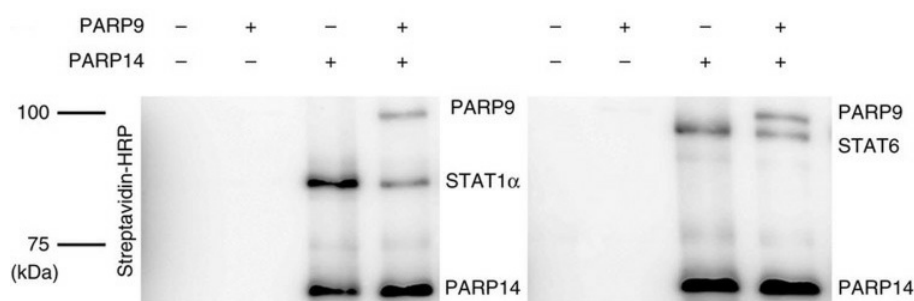
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Predicted MW:	87.2 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
Bioactivity:	Enzyme substrate (PMID: <a href="#">27796300</a> )
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.

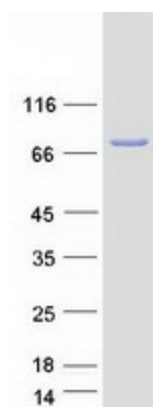

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<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<u>NP_009330</u>
<b>Locus ID:</b>	6772
<b>UniProt ID:</b>	<u>P42224</u>
<b>RefSeq Size:</b>	4157
<b>Cytogenetics:</b>	2q32.2
<b>RefSeq ORF:</b>	2250
<b>Synonyms:</b>	CANDF7; IMD31A; IMD31B; IMD31C; ISGF-3; STAT91
<b>Summary:</b>	The protein encoded by this gene is a member of the STAT protein family. In response to cytokines and growth factors, STAT family members are phosphorylated by the receptor associated kinases, and then form homo- or heterodimers that translocate to the cell nucleus where they act as transcription activators. The protein encoded by this gene can be activated by various ligands including interferon-alpha, interferon-gamma, EGF, PDGF and IL6. This protein mediates the expression of a variety of genes, which is thought to be important for cell viability in response to different cell stimuli and pathogens. The protein plays an important role in immune responses to viral, fungal and mycobacterial pathogens. Mutations in this gene are associated with Immunodeficiency 31B, 31A, and 31C. [provided by RefSeq, Jun 2020]
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>Protein Pathways:</b>	Chemokine signaling pathway, Jak-STAT signaling pathway, Pancreatic cancer, Pathways in cancer, Toll-like receptor signaling pathway

## Product images:



PARP9 inhibits the ADP-ribosylation of STAT1 alpha (OriGene [TP313858]) and STAT6 by PARP14 through protein ribosylation assay. PARP14 auto-ribosylation is also indicated. Biotin-labeled ribosylation of STAT1 alpha and STAT6 is detected by Western blot using streptavidin-HRP after SDS-PAGE. Figure cited from Nat Commun, PMID: 27796300



Coomassie blue staining of purified STAT1 protein (Cat# [TP313858]). The protein was produced from HEK293T cells transfected with STAT1 cDNA clone (Cat# [RC213858]) using MegaTran 2.0 (Cat# [TT210002]).