

Product datasheet for **TP720889**

STAT3 (NM_003150) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Human signal transducer and activator of transcription 3 (acute-phase response factor) (STAT3), transcript variant 2
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	Met1-Asn175
Tag:	C-His
Predicted MW:	21.8 kDa
Concentration:	lot specific
Purity:	>95% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	Provided lyophilized from a 0.2 µm filtered solution of 20 mM Tris-HCl, 150 mM NaCl
Endotoxin:	Endotoxin level is < 0.1 ng/µg of protein (< 1 EU/µg)
Reconstitution Method:	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. Dissolve the lyophilized protein in ddH ₂ O. It is not recommended to reconstitute a concentration less than 100 µg/ml. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Storage:	Store at -80°C.
Stability:	Stable for at least 6 months from date of receipt under proper storage and handling conditions.
RefSeq:	NP_003141
Locus ID:	6774
UniProt ID:	P40763
RefSeq Size:	4953
Cytogenetics:	17q21.2
RefSeq ORF:	2307
Synonyms:	ADMIO; ADMIO1; APRE; HIES



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Summary:

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. This protein is activated through phosphorylation in response to various cytokines and growth factors including IFNs, EGF, IL5, IL6, HGF, LIF and BMP2. This protein mediates the expression of a variety of genes in response to cell stimuli, and thus plays a key role in many cellular processes such as cell growth and apoptosis. The small GTPase Rac1 has been shown to bind and regulate the activity of this protein. PIAS3 protein is a specific inhibitor of this protein. This gene also plays a role in regulating host response to viral and bacterial infections. Mutations in this gene are associated with infantile-onset multisystem autoimmune disease and hyper-immunoglobulin E syndrome. [provided by RefSeq, Aug 2020]

Protein Families:

Druggable Genome, Transcription Factors

Protein Pathways:

Acute myeloid leukemia, Adipocytokine signaling pathway, Chemokine signaling pathway, Jak-STAT signaling pathway, Pancreatic cancer, Pathways in cancer