Datasheet for ABIN7555916

TYK2 Protein (AA 1-1187) (His tag)

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Overview

Quantity:	1 mg
Target:	TYK2
Protein Characteristics:	AA 1-1187
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TYK2 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant TYK2 Protein expressed in mammalian cells.
Sequence:	MPLRHWGMAR GSKPVGDGAQ PMAAMGGLKV LLHWAGPGGG EPWVTFSESS LTAEEVCIHI AHKVGITPPC FNLFALFDAQ AQVWLPPNHI LEIPRDASLM LYFRIRFYFR NWHGMNPREP AVYRCGPPGT EASSDQTAQG MQLLDPASFE YLFEQGKHEF VNDVASLWEL STEEEIHHFK NESLGMAFLH LCHLALRHGI PLEEVAKKTS FKDCIPRSFR RHIRQHSALT RLRLRNVFRR FLRDFQPGRL SQQMVMVKYL ATLERLAPRF GTERVPVCHL RLLAQAEGEP CYIRDSGVAP TDPGPESAAG PPTHEVLVTG TGGIQWWPVE EEVNKEEGSS GSSGRNPQAS LFGKKAKAHK AVGQPADRPR EPLWAYFCDF RDITHVVLKE HCVSIHRQDN KCLELSLPSR AAALSFVSLV DGYFRLTADS SHYLCHEVAP PRLVMSIRDG IHGPLLEPFV QAKLRPEDGL YLIHWSTSHP YRLILTVAQR SQAPDGMQSL RLRKFPIEQQ DGAFVLEGWG RSFPSVRELG AALQGCLLRA GDDCFSLRRC CLPQPGETSN LIIMRGARAS PRTLNLSQLS FHRVDQKEIT QLSHLGQGTR TNVYEGRLRV EGSGDPEEGK MDDEDPLVPG RDRGQELRVV LKVLDPSHHD IALAFYETAS LMSQVSHTHL AFVHGVCVRG PENIMVTEYV EHGPLDVWLR RERGHVPMAW KMVVAQQLAS

Product Details

	ALSYLENKNL VHGNVCGRNI LLARLGLAEG TSPFIKLSDP GVGLGALSRE ERVERIPWLA PECLPGGANS LSTAMDKWGF GATLLEICFD GEAPLQSRSP SEKEHFYQRQ HRLPEPSCPQ LATLTSQCLT YEPTQRPSFR TILRDLTRLQ PHNLADVLTV NPDSPASDPT VFHKRYLKKI RDLGEGHFGK VSLYCYDPTN DGTGEMVAVK ALKADCGPQH RSGWKQEIDI LRTLYHEHII KYKGCCEDQG EKSLQLVMEY VPLGSLRDYL PRHSIGLAQL LLFAQQICEG MAYLHAQHYI HRDLAARNVL LDNDRLVKIG DFGLAKAVPE GHEYYRVRED GDSPVFWYAP ECLKEYKFYY ASDVWSFGVT LYELLTHCDS SQSPPTKFLE LIGIAQGQMT VLRLTELLER GERLPRPDKC PCEVYHLMKN CWETEASFRP TFENLIPILK TVHEKYQGQA PSVFSVC **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalian cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	TYK2
Alternative Name:	TYK2 (TYK2 Products)

Target Details

Background:	Non-receptor tyrosine-protein kinase TYK2 (EC 2.7.10.2),FUNCTION: Tyrosine kinase of the non-receptor type involved in numerous cytokines and interferons signaling, which regulates cell growth, development, cell migration, innate and adaptive immunity (PubMed:8232552, PubMed:7813427, PubMed:7657660, PubMed:10995743, PubMed:10542297). Plays both structural and catalytic roles in numerous interleukins and interferons (IFN-alpha/beta) signaling (PubMed:10542297). Associates with heterodimeric cytokine receptor complexes and activates STAT family members including STAT1, STAT3, STAT4 or STAT6 (PubMed:10542297, PubMed:7638186). The heterodimeric cytokine receptor complexes are composed of (1) a TYK2-associated receptor chain (IFNAR1, IL12RB1, IL10RB or IL13RA1), and (2) a second receptor chain associated either with JAK1 or JAK2 (PubMed:7813427, PubMed:10542297, PubMed:7526154, PubMed:25762719). In response to cytokine-binding to receptors, phosphorylates and activates receptors (IFNAR1, IL12RB1, IL10RB or IL13RA1), creating docking sites for STAT members (PubMed:7526154, PubMed:7657660). In turn, recruited STATs are phosphorylated by TYK2 (or JAK1/JAK2 on the second receptor chain), form homo- and heterodimers, translocate to the nucleus, and regulate cytokine/growth factor responsive genes (PubMed:7657660, PubMed:10542297, PubMed:25762719). Negatively regulates STAT3 activity by promototing phosphorylation at a specific tyrosine that differs from the site used for signaling (PubMed:29162862). {ECO:0000269|PubMed:10542297, ECO:0000269|PubMed:10995743, ECO:0000269|PubMed:25762719, ECO:0000269|PubMed:29162862, ECO:0000269|PubMed:7526154, ECO:0000269|PubMed:7638186, ECO:0000269|PubMed:7657660, ECO:0000269|PubMed:7813427, ECO:0000269|PubMed:8232552}.
Molecular Weight:	133.7 kDa
UniProt:	P29597
Pathways:	JAK-STAT Signaling, Hepatitis C

Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid

Handling

Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months

