

Product datasheet for TP309680

OriGene Technologies, Inc.

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IL23 (IL23A) (NM_016584) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human interleukin 23, alpha subunit p19 (IL23A), 20 μg

Species: Human
Expression Host: HEK293T

Expression cDNA Clone >RC209680 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MLGSRAVMLLLLLPWTAQGRAVPGGSSPAWTQCQQLSQKLCTLAWSAHPLVGHMDLREEGDEETTND

VPH

IQCGDGCDPQGLRDNSQFCLQRIHQGLIFYEKLLGSDIFTGEPSLLPDSPVGQLHASLLGLSQLLQPEGH

HWETQQMPSLSPSQPWQRLLLRFKILRNLQAFVAVAARVFAHGAATLSP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

Predicted MW: 18.6 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: Protease substrate (PMID: <u>29038472</u>)

Cell treatment (PMID: <u>29038472</u>) MS digestion (PMID: <u>29038472</u>)

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 057668





Locus ID: 51561

UniProt ID: Q9NPF7

RefSeq Size: 1049

Cytogenetics: 12q13.3

RefSeq ORF: 567

Synonyms: IL-23; IL-23A; IL23P19; P19; SGRF

Summary: This gene encodes a subunit of the heterodimeric cytokine interleukin 23 (IL23). IL23 is

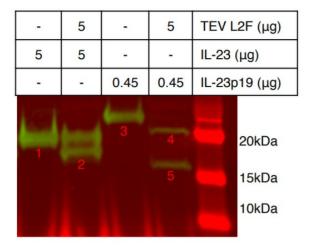
composed of this protein and the p40 subunit of interleukin 12 (IL12B). The receptor of IL23 is formed by the beta 1 subunit of IL12 (IL12RB1) and an IL23 specific subunit, IL23R. Both IL23 and IL12 can activate the transcription activator STAT4, and stimulate the production of interferon-gamma (IFNG). In contrast to IL12, which acts mainly on naive CD4(+) T cells, IL23

preferentially acts on memory CD4(+) T cells. [provided by RefSeq, Jul 2008]

Protein Families: Druggable Genome, Secreted Protein

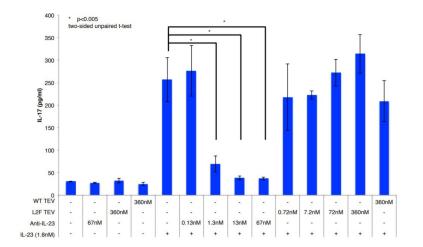
Protein Pathways: Cytokine-cytokine receptor interaction, Jak-STAT signaling pathway

Product images:

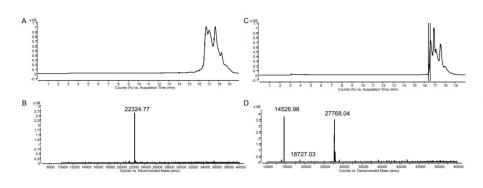


Identification of IL-23 cleavage sites by Western blot. IL-23 heterodimer (IL-23) and IL-23 monomer (IL-23p19) (OriGene TP309680) were incubated with or without TEV L2F. Reaction mixtures were subjected to Western blot with an anti-IL-23p19 monoclonal antibody. Figure cited from Nat Commun, PMID: 29038472

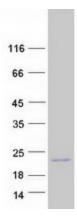




Cultured mouse mononuclear splenocytes secrete IL-17 in response to human IL-23 (OriGene TP309680) in the media. Addition of antibodies that neutralize IL-23 to the cell culture media prevents this response. Figure cited from Nat Commun, PMID: 29038472



Identification of two cleavage sites of TEV L2F protease within IL-23 monomer (OriGene TP309680) by mass spectrometry. Figure cited from Nat Commun, PMID: 29038472



Coomassie blue staining of purified IL23A protein (Cat# TP309680). The protein was produced from HEK293T cells transfected with IL23A cDNA clone (Cat# [RC209680]) using MegaTran 2.0 (Cat# [TT210002]).