

Datasheet for ABIN2667513
IL23 Protein (AA 1-196, AA 1-335)



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Overview

Quantity:	10 µg
Target:	IL23
Protein Characteristics:	AA 1-196, AA 1-335
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Application:	Flow Cytometry (FACS)

Product Details

Purity:	Purity is >95 % , as determined by Coomassie stained SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 0.01 ng per µg cytokine as determined by the LAL method.

Target Details

Target:	IL23
Alternative Name:	IL-23 (IL23 Products)
Background:	IL-23 is a member of the IL-6 family of cytokines, and it is constituted by two subunits, p19 and p40. The p19-p40 heterodimer is stabilized by a disulfide bond. The subunit p40 is shared by IL-23 and IL-12 cytokines. p19 mRNA is expressed in endothelial cells and polarized T cells, nevertheless, p40 is not expressed by these cells. Therefore, the availability of functional IL-23

Target Details

is limited by the expression of p40 and not p19. IL-23 exerts its biological activities through the interaction with a heterodimeric receptor complex composed of IL-12Rb1 and IL-23R. IL-23 activates Janus kinase (JAK)/signal transducer and activator of transcription signaling molecules (STAT). JAK2 is constitutively associated with the IL-23R chain, and binding of IL-23 to its receptor leads to phosphorylation of STAT1, STAT3, STAT4, and STAT5.

Molecular Weight: The total predicted molecular weight is 55.4 kDa. The non-reduced protein migrates at approximately 60 kDa and the DTT-reduced protein produces two bands at approximately 19 kDa (Leu 20-Ala 196) and 40 kDa (Met 23-Ser 335) by SDS-PAGE.

Application Details

Application Notes: Optimal working dilution should be determined by the investigator.

Comment: Biological activity: ED₅₀ ≤ 1.5 ng/ml, corresponding to a specific activity of ≥ 0.66 x 10⁶ units/mg, as determined by mouse splenocytes IL-17A secretion induced by mIL-23 in a dose dependent manner.

Restrictions: For Research Use only

Handling

Format: Liquid

Reconstitution: For maximum results, quick spin vial prior to opening. The protein can be aliquoted and stored from -20 °C to -70 °C. Stock solutions can also be prepared at 50-100 µg/mL in sterile buffer (PBS, HPBS, DPBS, or EBSS) containing carrier protein such as 0.2-1 % BSA or HSA and stored in working aliquots at -20 °C to -70 °C.

Buffer: 0.22 µm filtered protein solution is in PBS

Handling Advice: Avoid repeated freeze/thaw cycles.

Storage: -20 °C

Storage Comment: Unopened vial can be stored between 2°C and 8°C for one month, at -20°C for six months, or at -70°C for one year.