

## Human Interleukin-19 (IL-19) - Purified

<b>Alternate names:</b>	IL19
<b>Catalog No.:</b>	PA1096
<b>Quantity:</b>	2 µg
<b>Concentration:</b>	1 mg/ml (prior to lyophil.)
<b>Background:</b>	IL19 is a cytokine that belongs to the IL10 cytokine subfamily. IL-19 is found to be preferentially expressed in monocytes. It can bind the IL20 receptor complex and lead to the activation of the signal transducer and activator of transcription 3 (STAT3). A similar cytokine in mouse is reported to up-regulate the expression of IL6 and TNF-alpha and induce apoptosis, which suggests a role of this cytokine in inflammatory responses. Alternatively spliced transcript variants encoding the distinct isoforms have been described.
<b>Species:</b>	Human
<b>Source:</b>	E. coli, E.coli
<b>Format:</b>	<b>State:</b> Lyophilized <b>Purity:</b> >98% Purified by proprietary chromatographic techniques, sterile Filtered, purity is greater than 99.0 % as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE. <b>Buffer System:</b> 10 mM sodium citrate pH 5. <b>Reconstitution:</b> Sterile 18MΩ-cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.
<b>Description:</b>	Interleukin-19 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 155 amino acids. <b>AA Sequence:</b> The sequence of the first five N-terminal amino acids was determined and was found to be Met-Leu-Arg-Arg-Cys. <b>Biological Activity:</b> The activity is determined by it's ability to activate STAT following receptor-ligand interaction. <b>Molecular weight:</b> 18 kDa 17913 Dalton.
<b>Storage:</b>	Lyophilized product is stable at room temperature for one month, should be stored desiccated below -20 °C. Upon reconstitution it should be stored at 2 – 8 °C up to one week and for future use below -20 °C. For long term storage it is recommended to add a carrier protein (0.1 % HSA or BSA). Avoid repeated freezing and thawing. Shelf life: one year from despatch.
<b>General Readings:</b>	1. Okayama N, Suehiro Y, Hamanaka Y, Nakamura J, Hinoda Y. Association of interleukin-19 gene polymorphisms with age. J Gerontol A Biol Sci Med Sci. 2007 May;62(5):507-11. PubMed PMID: 17522354.

2. Zdanov A. Structural studies of the interleukin-19 subfamily of cytokines. *Vitam Horm.* 2006;74:61-76. PubMed PMID: 17027511.
3. Hsing CH, Hsieh MY, Chen WY, Cheung So E, Cheng BC, Chang MS. Induction of interleukin-19 and interleukin-22 after cardiac surgery with cardiopulmonary bypass. *Ann Thorac Surg.* 2006 Jun;81(6):2196-201. PubMed PMID: 16731153.
4. Chen PJ, Wei CC, Wang C, Chen FW, Hsu YH, Chang MS. Promoter analysis of interleukin 19. *Biochem Biophys Res Commun.* 2006 Jun 9;344(3):713-20. Epub 2006 Apr 7. PubMed PMID: 16631120.
5. Otkjaer K, Kragballe K, Funding AT, Clausen JT, Noerby PL, Steiniche T, et al. The dynamics of gene expression of interleukin-19 and interleukin-20 and their receptors in psoriasis. *Br J Dermatol.* 2005 Nov;153(5):911-8. PubMed PMID: 16225599.
6. Li HH, Lin YC, Chen PJ, Hsiao CH, Lee JY, Chen WC, et al. Interleukin-19 upregulates keratinocyte growth factor and is associated with psoriasis. *Br J Dermatol.* 2005 Sep;153(3):591-5. PubMed PMID: 16120148.

**Pictures:**

Precursor- Protein structure and amino acid sequence

