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## PA1084X OriGene EU

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## **Recombinant Human Interleukin-9 Catalog No.:** PA1084X **Quantity:** 10 µg **Concentration:** 1 mg/ml **Background:** Factor that is thought to be a regulator of hematopoiesis. It has been shown to enhance the growth of human mast cells and megakaryoblastic leukemic cells as well as murine helper tcell clones. IL-9 is a glycoprotein with a molecular weight of 32-39 that is derived from Tcells, and maps to human chromosome 5. **Species:** Human E. coli Source: Format: State: Sterile Filtered White lyophilized (freeze-dried) powder. Purity: >98% Greater than 98.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE. **Buffer System:** Lyophilized from a concentrated solution in water containing no additives. Reconstitution: It is recommended to reconstitute the lyophilized Interleukin-9 in sterile 18MĎ?-cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions. **Description:** Interleukin-9 Human Recombinant produced in E.Coli is a single, non-glycosylated single polypeptide chain containing 127 amino acids. The IL-9 is purified by proprietary chromatographic techniques. AA Sequence: The sequence of the first five N-terminal amino acids was determined and was found to be Met-Gln-Gly-Cys-Pro. Biological Activity: The ED50 as determined by the dose-dependant stimulation of human MO7e cells is < 0.2 ng/ml, corresponding to a Specific Activity of 5 x 106 IU/mg. Molecular weight: 14 kDa 14004 Dalton. Lyophilized Interleukin-9 although stable at room temperature for 3 weeks, should be Storage: stored desiccated below -18°C. Upon reconstitution IL9 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please avoid freeze-thaw cycles. General Readings: 1. Qiu L, Lai R, Lin Q, Lau E, Thomazy DM, Calame D, et al. Autocrine release of interleukin-9 promotes Jak3-dependent survival of ALK+ anaplastic large-cell lymphoma cells. Blood. 2006 Oct 1;108(7):2407-15. Epub 2006 Jun 8. PubMed PMID: 16763206. 2. McNamara PS, Smyth RL. Interleukin-9 as a possible therapeutic target in both asthma and chronic obstructive airways disease. Drug News Perspect. 2005 Dec;18(10):615-21. PubMed PMID: 16491163. 3. Devos S, Cormont F, Vrtala S, Hooghe-Peters E, Pirson F, Snick J. Allergen-induced

For research and in vitro use only. Not for diagnostic or therapeutic work. Material Safety Datasheets are available at www.acris-antibodies.com or on request.



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1/2



## PA1084X: Recombinant Human Interleukin-9

interleukin-9 production in vitro: correlation with atopy in human adults and comparison with interleukin-5 and interleukin-13. Clin Exp Allergy. 2006 Feb;36(2):174-82. PubMed PMID: 16433854.

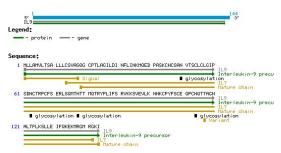
4. Expression of interleukin-9 in nasal natural kill er/T-cell lymphoma cell lines and patients. Clin Cancer Res 2005 Dec 1;11(23):8250-7

5. Poulin LF, Habran C, Stordeur P, Goldman M, McKenzie A, Van Snick J, et al. Interleukin-9 stimulates the production of interleukin-5 in CD4+ T cells. Eur Cytokine Netw. 2005 Sep;16(3):233-9. PubMed PMID: 16266865.

6. Yang L, Aozasa K, Oshimi K, Takada K. Epstein-Barr virus (EBV)-encoded RNA promotes growth of EBV-infected T cells through interleukin-9 induction. Cancer Res. 2004 Aug 1;64(15):5332-7. PubMed PMID: 15289339.

**Pictures:** 

Precursor- Protein structure and amino acid sequen





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