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Product Information

Cytokine Responsive Gene-2

Mouse Recombinant
Expressed in *E. coli*

Product Number **C261**
Storage Temperature -20°C

Product Description

The gene for CRG-2, a mouse homologue of human IP-10, was identified as an immediate early gene induced in response to macrophage activation. CRG-2 mRNA is induced by a/b/g-interferons and by lipopolysaccharide in macrophages, astrocytes and microglia. CRG-2 cDNA encodes a 98 amino acid residue precursor protein with a 21 residue signal peptide that is cleaved to form the 77 residue secreted mature protein. CRG-2 shares approximately 67% sequence identity with human IP-10 (Product No. I154). Human IP-10 has been reported to be a potent inhibitor of angiogenesis and to display a potent thymus-dependent anti-tumor effect. A chemokine receptor, CXCR3, specific for IP-10 and MIG (Product No. M252) has been cloned and shown to be highly expressed in IL-2-activated T-lymphocytes.

Preparation Instructions

Reconstitute the contents of the vial using sterile phosphate buffered saline (PBS) containing at least 0.1% human serum albumin or bovine serum albumin be added to the vial to prepare a stock solution of no less than 20 µg/ml.

Storage/Stability

Prior to reconstitution, store tightly sealed at -20°C. After reconstitution and for continuous use, store at

2 - 8°C for up to one month. For extended storage, solution may be frozen in working aliquots. Storage in "frost-free" freezers is not recommended. Repeated freezing and thawing is not recommended.

Procedure

The biological activity of CRG-2 is measured by its ability to chemoattract human lymphocytes cultured in the presence of IL-2 for 8 - 10 days. The ED₅₀ for this effect is typically 0.8 - 2.5 µg/ml.

Product Profile

Source: A DNA sequence encoding mature mouse CRG-2 was expressed in *E. coli*^{1,2}

Molecular Weight: Approx. 8.8 kDa recombinant protein containing 77 amino acids

Purity: >97% as determined by SDS-PAGE

Formulation: Lyophilized from a sterile filtered solution in 30% acetonitrile and 0.1% TFA, containing 50 µg of bovine serum albumin per 1 µg of cytokine

References

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2. Vanguri, P., Farber, J., *J. Biol. Chem.* **265**, 15049-15057 (1990).
3. Vanguri, P., *J. Neuroimmunol.* **56**, 35-43, (1995).
4. Asensio, V.C., Campbell, I.L., *J. Virol.* **71**, 7832-7840 (1997).

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