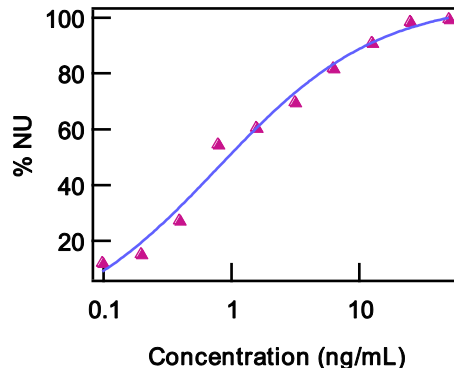


Human Activin A Recombinant Protein

Catalog Number: 14-8993

RUO: For Research Use Only. Not for use in diagnostic procedures.



Inhibition of MPC-11 proliferation by Human Activin A Recombinant Protein

Product Information

Contents: Human Activin A Recombinant Protein

REF **Catalog Number:** 14-8993

Concentration: 0.1 mg/mL

Handling Conditions: For best recovery, quick-spin vial prior to opening. Use in sterile environment.

Source: Insect expressed amino acids Gly311-Ser426, accession number NM_002192

Molecular Mass: 26 kDa

Purity: Greater than or equal to 95%, as determined by SDS-PAGE

Endotoxin: Less than 0.01 ng/ug cytokine as determined by the LAL assay.

Bioactivity: The ED₅₀ of this protein, as measured by inhibition of MPC-11 mouse plasmacytoma cell proliferation, is 0.75-3 ng/mL. This corresponds to a specific activity of 1.3 x 10⁶ - 3.3 x 10⁵ Units/mg.

Formulation: Sterile liquid; 20 mM glycine, 150 mM NaCl with 1% BSA, pH 3.0. 0.22 um filtered.

Temperature Limitation: Store at less than or equal to -70°C.

Batch Code: Refer to vial

Use By: Refer to vial



LOT



Description

Activin A is a member of the TGF- β superfamily, along with the other activin proteins and the structurally related inhibins. The activins are dimeric proteins formed by the association of two of the four existing β subunits, β A, β B, β C, and β E. These subunits are shared with the inhibin proteins, which are heterodimers of one β and one α chain. Activin A is a homodimer of two 13 kDa β A subunits, which can also associate with β B or β C to form Activin AB or AC, respectively. Activin A is expressed by various cell types and exhibits pleiotropic effects including the regulation of metabolism, homeostasis, cell proliferation and differentiation, apoptosis, and tissue healing. Activin A has been recently reported to work in synergy with TGF- β to promote the induction of antigen specific iTreg cells leading to inhibition of Th1 and Th2-mediated responses.

Applications Reported

Human Activin A Recombinant Protein is biologically active.

Applications Tested

The ED₅₀ of this protein, as measured by inhibition of MPC-11 mouse plasmacytoma cell proliferation, is 0.75-3

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ng/ml. This corresponds to a specific activity of 1.3×10^6 - 3.3×10^5 Units/mg.

References

Semitekoulou M, Alissafi T, Aggelakopoulou M, Kourepini E, Kariyawasam HH, Kay AB, Robinson DS, Lloyd CM, Panoutsakopoulou V, Xanthou G. Activin-A induces regulatory T cells that suppress T helper cell immune responses and protect from allergic airway disease. *J Exp Med*. 2009 Aug 3;206(8):1769-85.

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Related Products

12-5826 Anti-Human BAMBI PE (4E8)

13-5826 Anti-Human BAMBI Biotin (4E8)

14-5826 Anti-Human BAMBI Purified (4E8)

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