Product Description

Alternate Names: Inhibin beta-1, FRP, FSH-releasing protein  
Accession Number: P08476 / Q04998 / P18331

Description: Activin A is a member of the transforming growth factor beta (TGF-β) family of proteins and functions to stimulate follicle-stimulating hormone (FSH) secretion. Activins are produced in many tissue types including the skin, gonads, lungs, and pituitary gland. Activins interact with receptor type I and type II serine/threonine protein kinases, to activate SMAD signaling and regulate diverse cellular functions, such as cell proliferation, differentiation, wound healing, apoptosis, and metabolism. Activin A is a homodimer comprised of two activin βA chains. Cleavage of the N-terminal propeptide renders the Activin protein biologically active. Human Activin A shares 100% amino acid sequence identity with mouse, rat, porcine, bovine, and feline Activin A proteins.

Source: Genetically modified E.coli.

Predicted MW: Dimer, 13.1/26.2 kDa (with 117/234 amino acids)

AA Sequence: MGLEDGKVN ICCKQFFVS FKDIGWNDWI IAPSGYHANY CEGECPSHIA GTSGSSLSFH STVINHYRMR GHSPFANLKS CCVPTKLRPM SMLYYDDGQN IIKKDIQNMI VEECGCS

Formulation: Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)

Product Specifications*

*Lot-specific values for the following specifications are supplied with each production lot on its corresponding COA.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Method of Determination</th>
<th>Acceptance Criteria</th>
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<tbody>
<tr>
<td>Purity</td>
<td>Reducing and Non-Reducing SDS-PAGE</td>
<td>≥95%</td>
</tr>
<tr>
<td>Endotoxin</td>
<td>Kinetic LAL (50% confidence)</td>
<td>≤1 EU/µg</td>
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<tr>
<td>Biological Activity</td>
<td>Cytotoxicity of MPC-11 cells</td>
<td>ED50 ≤ 10 ng/mL (≥ 1.0 x 10^5 units/mg)</td>
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Product Preparation and Storage

Country of Origin: USA  
Shipping: Room temperature  
Storage Prior to Reconstitution: -20°C

Product Reconstitution: Sterile water at 0.1 mg/mL

Instructions: Centrifuge vial before opening. Suspend the product by gently pipetting the above recommended solution down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution. For prolonged storage, dilute to working aliquots in a 0.1% BSA solution, store at -80°C and avoid repeat freeze thaws.

Expiration Date:
12 months from date of receipt when stored at -20°C to -80°C as supplied.
1 month when stored at 4°C after reconstituting as directed.
3 months when stored at -20°C to -80°C after reconstituting as directed.

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!