



人と科学のステキな未来へ

コスモ・バイオ株式会社



## Product Data Sheet

Recombinant Human / Mouse / Rat Activin A

Catalog Number: 800-01

### 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- $\beta$ ) 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  $\beta$ A 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:** MGLECDGKVN ICCKKQFFVS 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.

Specification	Method of Determination	Acceptance Criteria
<b>Purity</b>	Reducing and Non-Reducing SDS-PAGE	$\geq 95\%$
<b>Endotoxin</b>	Kinetic LAL (50% confidence)	$\leq 1$ EUs/ $\mu$ g
<b>Biological Activity</b>	Cytotoxicity of MPC-11 cells	ED50 $\leq 10$ ng/mL ( $\geq 1.0 \times 10^5$ units/mg)

### 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!**