

## Certificate of Analysis

### Recombinant Human Activin A

**Catalog#** 120-14E

**Lot #** 0609478

**Expiration Date:** July 2014

**Source:** *E.coli*

**Sequence:** GLECDGKVN I CCKKQFFVSF KDIGWNDWII  
APSGYHANYC EGECPSHIAG TSGSSLSFHS TVINHYRMRG  
HSPFANLKSC CVPTKLRPMS MLYYDDGQNI IKKDIQNMIV  
EECGCS

**Synonyms:** none

**Description:** Activin A is a TGF- $\beta$  family member that exhibits a wide range of biological activities including regulation of cellular proliferation and differentiation, and promotion of neuronal survival. Elevated levels of Activin A in human colorectal tumors and in postmenopausal women have been implicated in colorectal and breast cancers, respectively. The biological activities of Activin A can be neutralized by inhibins and by the diffusible TGF- $\beta$  antagonist, follistatin. Recombinant human Activin A is a 26.0 kDa disulfide-linked homodimer of two  $\beta$ A chains, each containing 116 amino acid residues.

**Purity:**  $\geq 97\%$  by SDS-PAGE gel and HPLC analyses.

**Endotoxin:** Endotoxin level is  $< 0.1$  ng / $\mu$ g of Activin A ( $< 1$  EU/ $\mu$ g).

**Formulation:** Sterile filtered through a 0.2 micron filter. Lyophilized with no additives.

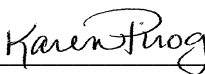
**Reconstitution:** Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. *Do not vortex.* This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

**Storage/Stability:** The lyophilized protein is stable at room temperature for up to 1 month. Working aliquots stored with a carrier protein are stable for at least 7 months at -20°C to -80°C. Avoid repeated freeze/thaw cycles.

**Biological activity:** Determined by its ability to inhibit the proliferation of mouse MPC-11 cells. The expected ED<sub>50</sub> is  $\leq 2.0$  ng/ml, corresponding to a specific activity of  $\geq 5 \times 10^5$  units/mg.

For a list of references using this product please visit our website at [www.peprotech.com](http://www.peprotech.com)

**Country of Origin:** USA

  
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QC Manager

**Usage:** For Research Use Only. Not for use in diagnostic or therapeutic procedures.