

## Certificate of Analysis

### DESCRIPTION

<b>Product:</b>	Microsphere-encapsulated recombinant human Activin A protein
<b>Size:</b>	1 mL or 5 mL
<b>Date of Manufacture:</b>	9/27/2017
<b>Expiration Date:</b>	<b>4/1/2018</b>
<b>ACT A-Molecular Mass:</b>	13 kDA (monomer)
<b>ACT A-Primary Structure:</b>	Disulfide-linked homodimer with Gly311 N-Terminal (426 amino acids residues)

### PREPARATION AND STORAGE

<b>Reconstitution:</b>	Packaged as solution in DMEM/F12.
<b>Use:</b>	10 µL/mL StemBeads® Activin A = 10 ng/mL slow release Activin A.
<b>Shipping &amp; Storage:</b>	This product is shipped at 4°C. Upon receipt, store it immediately at 2-8°C under sterile conditions.
<b>Stability :</b>	Stable for 6 months if stored at the recommended temperature above.

### SPECIFICATIONS

<b>Sterility:</b>	No growth of bacteria or fungi observed using direct immersion method in liquid culture	Result:	<b>PASS</b>
<b>ACT A Protein Release Profile:</b>	10 ng/mL ± 2 ng stable release of sol. Activin A at StemBeads® ActivinA Conc. of 10 µL/mL	Result:	<b>PASS</b>
<b>Average Size (diameter):</b>	45 µm ± 25 µm (Quantification performed using ImageJ software from NIH)	Result:	<b>PASS</b>

This product is manufactured and controlled in accordance with all StemCultures Quality Control criteria.

This product meets all StemCultures Quality Control criteria. Therefore it is hereby authorized to be released for sale.



Manufacturer

10/18/17

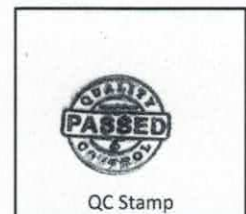
Date



Quality Assurance Manager

Date

Please ensure the presence of Quality Control stamp; this certifies that the highest level of quality and metrics were used during StemCultures manufacturing procedures



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