

PRODUCT INFORMATION  
**Croyez GMP® Activin A, Human**

<b>Catalog number</b>	C01119-GMP-100 / C01119-GMP-1000
<b>Package</b>	100 µg / 1 mg
<b>Description</b>	<p>Activin and Inhibin are members of the TGF-beta superfamily of cytokines and are involved in a wide range of biological processes including tissue morphogenesis and repair, fibrosis, inflammation, neural development, hematopoiesis, reproductive system function, and carcinogenesis. Activin A is strongly expressed in wounded skin, and overexpression of Activin A in epidermis of transgenic mice improves wound healing and enhances scar formation. Activin A also regulates the morphogenesis of branching organs such as the prostate, lung, and kidney. There is also evidence showed that lack of Activin A during development results in neural developmental defects.</p>
<b>Source</b>	<p><i>Escherichia coli</i>            Animal-free reagent and laboratory            Manufactured and tested under GMP guideline</p>
<b>Sequence</b>	<p>MGLECDGKVNICCKKQFFVSFKDIGWNDWIIAPSGYHANYCEGECPSHIAGTSG            SLSLFHSTVINHYMRGRHSPFANLKSCCVPTKLRPMSMLYYDDGQNIKKDIQN            MIVEECGCS with polyhistidine tag at the C-terminus</p>
<b>Endotoxin level</b>	<0.1 EU per 1 µg of the protein by the LAL method.
<b>Activity</b>	<p>Measure by its ability to induce hemoglobin expression in K562 cells. The ED<sub>50</sub> for this effect is &lt;0.85 ng/mL. The specific activity of recombinant human Activin A is approximately &gt;1.4 x 10<sup>3</sup> IU/mg.</p>
<b>Purity</b>	<p>&gt;95% as determined by SDS-PAGE.            Purified by Ni-NTA chromatography.</p>
<b>Formulation</b>	The protein was lyophilized from a solution containing 0.1% sarkosyl in 1X PBS, pH 8.0.
<b>Reconstitution</b>	<p>It is recommended to reconstitute the lyophilized protein in sterile H<sub>2</sub>O to a concentration not less than 100 µg/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.</p>
<b>Storage</b>	<p>Lyophilized protein should be stored at -20°C. This product is stable for one year upon receipt, when handled and stored as instructed. Upon reconstitution, protein aliquots should be stored at -20°C or -80°C. Avoid repeated freeze/thaw cycles.</p>

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**Note** Please use within one month after protein reconstitution.

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**Specification** Croyez GMP® recombinant proteins are manufactured in ISO 13485:2016 and GMP-certified facility. The processes include:

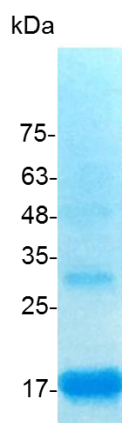
- Testing and traceability of raw material
- Records of the maintenance and equipment calibration
- Personnel training records
- Batch-to-batch consistency
- Documentation of QA control and process changes
- Manufactured and tested under an ISO 13485:2016 certified quality management system
- Stability monitor of product shelf-life

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**Reference**

1. Bloise E. et al. (2019) *Physiol Rev.* 99,1: 739-780.
2. Gressner OA. (2011) *Vitam Horm.* 85: 59-77.
3. de Kretser DM. et al. (2012) *Mol Cell Endocrinol.* 359,1-2: 101-6.

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SDS-PAGE analysis of Croyez GMP® Activin A, Human

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