

PRODUCT INFORMATION

GMP® Activin A, Human

v. 250301

Catalog number	C01119-GMP-1000
Package	1 mg
Description	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.
Expression System	Escherichia coli
Species of Origin	Human
Affinity Tag	His Tag (C-term)
Sequence	MGLECDGKVNICCKKQFFVSFKDIGWNDWIIAPSGYHANYCEGECPSHIAGTS GSSLSFHSTVINHYRMRGHSPFANLKSCCVPTKLRPMSMLYYDDGQNIIKKDIQ NMIVEECGCS with polyhistidine tag at the C-terminus
Endotoxin level	<0.1 EU per 1 µg of the protein by the LAL method.
Activity	Measure by its ability to inhibit the proliferation of mouse MPC-11 cells. The ED $_{50}$ for this effect is <10 ng/mL. The specific activity of recombinant human Activin A is approximately >1.0 x 10^3 IU/mg.
Purity	>95% as determined by SDS-PAGE analysis.
Mycoplasma	Not detected
Form	Lyophilized
Storage Buffer	Lyophilized from a 0.2 µm filtered solution of PBS containing 0.1% sarkosyl, pH 8.0.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile H ₂ O to a concentration not less than 0.5 mg/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.
Stability & Storage	This product is stable after storage at:



	 -20°C for 12 months in lyophilized state from date of receipt. -20°C or -80°C for 1 month under sterile conditions after reconstitution. Avoid repeated freeze/thaw cycles.
Specification	Croyez GMP® recombinant proteins are manufactured in ISO 13485:2016 and GMP-certified facility. The processes include: • Animal-free reagent and laboratory • Manufactured and tested under GMP guideline • 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
Reference	 Bloise E. et al. (2019) <i>Physiol Rev.</i> 99,1: 739-780. Gressner OA. (2011) <i>Vitam Horm.</i> 85: 59-77. de Kretser DM. et al. (2012) <i>Mol Cell Endocrinol.</i> 359,1-2: 101-6.
	kDa 75- 60- 45- 35- 25- 17- 11- SDS-PAGE analysis of GMP® Activin A, Human

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