

CHAMOT

Recombinant Activin B, Human, Animal-Free

CM119-5HP

CM119-20HP

CM119-100HP

CM119-500HP

CM119-1000HP



CHAMOT

乔默®生物

Specialize In Cytokines



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Recombinant Activin B, Human, Animal-Free

Catalog#	CM119-5HP	CM119-20HP	CM119-100HP	CM119-500HP	CM119-1000HP
Size	5 ug	20 ug	100 ug	500 ug	1 mg

Product Specifications

Background	Activin B is the cytokine of the TGF-beta family, which is a 13 kDa protein containing 115 amino acid residues. Activin B has the wide variety of biological function including stem cell differentiation, inflammation, bone remodeling and neural development. They also have a role in regulation of FSH secretion. Activin B induces the phosphorylation of Smad which binds the smad binding element.
Synonyms	Activin Beta B, INHBB; inhibin beta B chain
Uniprot ID	P09529
Molecular Weight	The protein has a calculated MW of 13.75 kDa. The protein migrates as 14 kDa under reducing condition (SDS-PAGE analysis).
Expression System	Escherichia coli
Purity	>98% as determined by SDS-PAGE.
Activity	Measure by its ability to induce hemoglobin expression in K562 cells. The ED ₅₀ for this effect is <0.7 ng/mL. The specific activity of recombinant human Activin B is > 1.5 x 10 ⁶ IU/mg.
Endotoxin Level	<0.1 EU per 1 µg of the protein by the LAL method.
Protein Sequence	MGLECDGRTNLCCRQQFFIDFRLIGWNDWIIAPTGYGNYCEGSCPAYLAGVPGSASSFHTAVVNQYR MRGLNPGTVNSCCIPTKLSTMSMLYFDDEYNIVKRDVPMIVEECGCA with polyhistidine tag at the C-terminus.
Form	The protein was lyophilized from a 0.2 µm filtered solution containing 1X PBS, pH 8.0. If you have any concerns or special requirements, please confirm with us.
Application	Cell Culture

Product Note

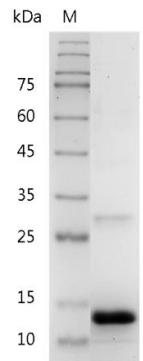
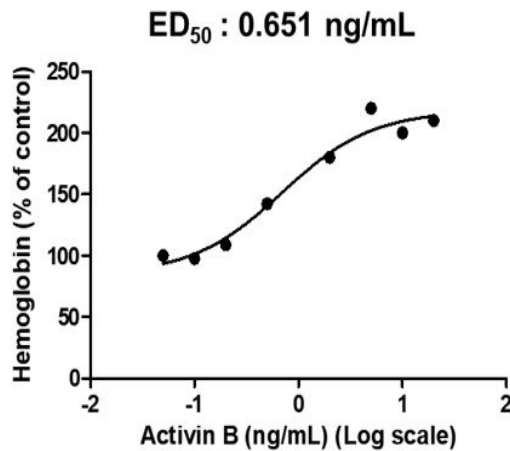
Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the lyophilized protein in sterile H₂O to a concentration not less than 100 µg/mL and incubate the stock solution at room temperature for

at least 20 mins to ensure sufficient re-dissolved. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

Storage/Shipping

Stability & Storage	Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to 8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.
Shipping	Blue Ice

Scientific Data

	 ED₅₀ : 0.651 ng/mL <table border="1"><caption>Approximate data points from the Hemoglobin dose-response curve</caption><thead><tr><th>Activin B (ng/mL) (Log scale)</th><th>Hemoglobin (% of control)</th></tr></thead><tbody><tr><td>-1.2</td><td>100</td></tr><tr><td>-1.0</td><td>100</td></tr><tr><td>-0.8</td><td>110</td></tr><tr><td>-0.5</td><td>140</td></tr><tr><td>0.0</td><td>180</td></tr><tr><td>0.5</td><td>220</td></tr><tr><td>1.0</td><td>200</td></tr><tr><td>1.2</td><td>210</td></tr></tbody></table>	Activin B (ng/mL) (Log scale)	Hemoglobin (% of control)	-1.2	100	-1.0	100	-0.8	110	-0.5	140	0.0	180	0.5	220	1.0	200	1.2	210
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SDS- PAGE analysis of recombinant human Activin B	Human Activin B, His Tag, E. coli induced hemoglobin expression in K562 cells, with the ED ₅₀ at 0.651 ng/mL.																		