

# Human/Mouse/Rat Activin A Recombinant Protein



Orders: 877-616-CELL (2355)

orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com

cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

# 10 µg

## For Research Use Only. Not for Use in Diagnostic Procedures.

MW (kDa):	UniProt ID:	Entrez-Gene Id:
26	#P08476	3624
Background		Activin A is a pleiotropic cytokine that plays an important role in the regulation of the immune response and has been shown to possess both proinflammatory and anti-inflammatory activities (1-3). This cytokine is a member of the TGF- $\beta$ superfamily known to signal through the Smad- and MAPK-dependent pathways by binding to the activin receptors type I (Alk2, Alk4) and type II (ActRIIA, ActRIIB) (1,2). Activin A is expressed by several cell types, including endothelial cells, mast cells, monocytes, macrophages, and dendritic cells (DCs) (4-6). The effect that Activin A has on the immune response makes it an important cytokine to study when looking at different diseases, such as allergy, autoimmunity, acute and chronic inflammation, and cancer (1,5).
Endotoxin		Endotoxin levels are less than or equal to 1 EU / 1 $\mu$ g h/m/r Activin A.
Purity		A greater than or equal to 95% purity was determined by SDS-PAGE.
Source / Purifica	ation	Recombinant human/mouse/rat Activin A was expressed in <i>E. coli</i> and is supplied in a lyophilized form.
Bioactivity		The bioactivity of recombinant h/m/r Activin A was determined in an MPC-11 cell cytotoxicity assay. The $ED_{50}$ of each lot is less than or equal to 10 ng/ml.
Background Ref	erences	1. Morianos, I. et al. (2019) <i>J Autoimmun</i> 104, 102314. 2. Seeger, P. et al. (2014) <i>J Immunol</i> 192, 1241-8. 3. Samitas, K. et al. (2016) <i>Eur Respir J</i> 47, 769-82. 4. Sierra-Filardi, E. et al. (2011) <i>Blood</i> 117, 5092-101. 5. Hedger, M.P. et al. (2011) <i>Vitam Horm</i> 85, 255-97. 6. Sozzani, S. and Musso, T. (2011) <i>Blood</i> 117, 5013-5.

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