

HUMANKINE® ACTIVE CYTOKINES AND GROWTH FACTORS

The HumaXpress human HEK293 cell expression system produces our Humankine® recombinant proteins which offer the following advantages:

- ✓ **Human cell-expressed**
- ✓ **Free of animal components**
- ✓ **Endotoxin-free**
- ✓ **Higher activity and stability**
- ✓ **Native post-translational modifications and folding**

50+ products now available as part of the Proteintech catalog.

HUMANKINE® PRODUCT LINE

Catalog number	Product name	Citations
HZ-1138	Activin A	13
HZ-1222	beta NGF	
HZ-1128	BMP-2	17
HZ-1045	BMP-4	30
HZ-1229	BMP-7	6
HZ-1211	Cystatin	1
HZ-1168	EPO	2
HZ-1285	FGF Basic TS	
HZ-1218	FGF-4	
HZ-1100	FGF-7 (KGF)	1
HZ-1103	FGF-8b	1
HZ-1151	FLT3 Ligand	7
HZ-1207	G-CSF	4
HZ-1002	GM-CSF	8
HZ-1084	HGF	10

Catalog number	Product name	Citations
HZ-1007	HGH	
HZ-3001	HSA	1
HZ-1066	IFN alpha 2A	3
HZ-1072	IFN alpha 2B	
HZ-1298	IFN beta	
HZ-1301	IFN gamma	1
HZ-1164	IL-1 beta	15
HZ-1145	IL-10	
HZ-1256	IL-12	3
HZ-1113	IL-17 (IL-17A)	3
HZ-1116	IL-17F	
HZ-1015	IL-2	3
HZ-1254	IL-23	10
HZ-1275	IL-27	1
HZ-1235	IL-28A	

Catalog number	Product name	Citations
HZ-1245	IL-28B	
HZ-1156	IL-29	
HZ-1074	IL-3	7
HZ-1004	IL-4	9
HZ-1019	IL-6	16
HZ-1281	IL-7	2
HZ-1240	IL-9	
HZ-1109	Lefty-1	1
HZ-1292	LIF	
HZ-1192	M-CSF	3
HZ-1118	Noggin	3
HZ-1030	Oncostatin M	2
HZ-1215	PDGF-aa	1
HZ-1308	PDGFbb	

Catalog number	Product name	Citations
HZ-1278	Pleiotrophin-PTN	
HZ-1161	pro-IGF-II	
HZ-1024	SCF	8
HZ-1306	Sonic Hedgehog	
HZ-1011	TGF beta 1	60
HZ-1092	TGF beta 2	4
HZ-1090	TGF beta 3	8
HZ-3010	Thrombin	1
HZ-1014	TNF alpha	9
HZ-1248	TPO	2
HZ-1204	VEGF 121	10
HZ-1038	VEGF 165	7
HZ-1296	Wnt3A	8

PROTEINTECH HUMANKINE[®] ACTIVIN A

Proteintech's Humankine[®] Activin A is made from HEK293 human cells, conferring authentic glycosylation and folding in addition to superior stability and activity.

Product name	Catalog number	ED50	Purity	Citations
Activin A	HZ-1138	3.4 ng/mL	>95%	13

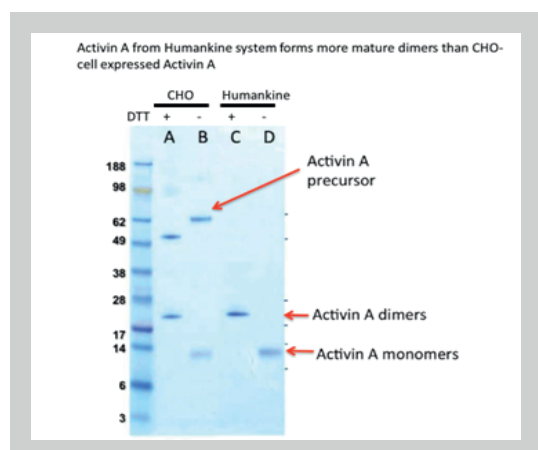


Figure 1 – SDS-PAGE gel with Coomassie blue staining of purified activin A from CHO cell and Humankine[®] systems, demonstrating the formation of mature activin A dimers.

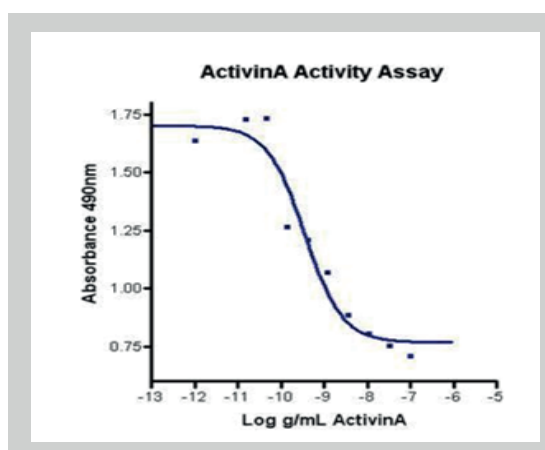


Figure 2 – The activity of Humankine[®] Activin A was determined by the dose-dependent inhibition of proliferation of the MPC11 cell line (mouse plasmacytoma cell line) using Promega CellTiter96[®] Aqueous Non-Radioactive Cell Proliferation Assay.