

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 |

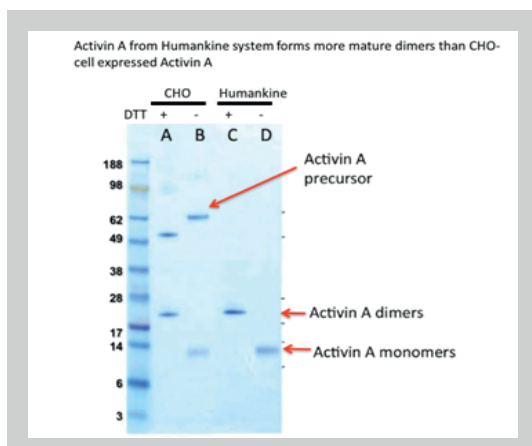


Figure 1 – SDS-PAGE gel with Coomassie blue staining of purified activin A from CHO cell and Humankine[®] systems, demonstrating the formation of mature activin A dimers.

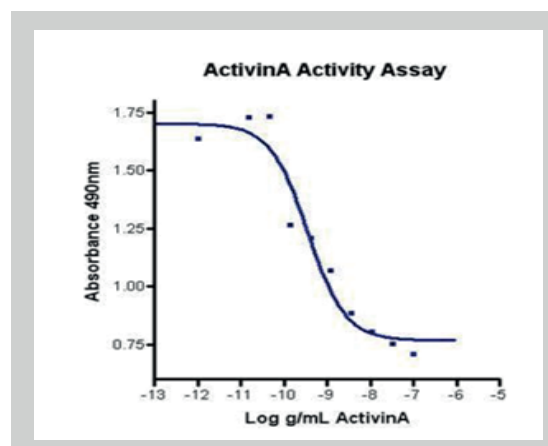


Figure 2 – The activity of Humankine[®] Activin A was determined by the dose-dependent inhibition of proliferation of the MPC11 cell line (mouse plasmacytoma cell line) using Promega CellTiter96[®] Aqueous Non-Radioactive Cell Proliferation Assay.