



PEPROTECH[®]

Not Just Cytokines!

Cytokines for Stem Cell Research

Cell Type	Expansion Factors	Differentiation Factors	Other Relevant Recombinant Factors
Embryonic Stem Cells	Activin's FGF basic TGF- β 1 Wnt-3a	BAFF BDNF BMP's FGF-4 Follistatin (BMP Inhibitor) GDF's Nanog/Nanog-TAT Noggin (BMP Inhibitor) Sox-2/Sox2-TAT Wnt's	b Cellulin b-Defensins cMyc / cMyc-TAT DKK-1 Epiregulin Epo Galectin 1 G-CSF GM-CSF HB-EGF IFN γ IGF 1 IL-1 α IL-1 β IL-10 IL-11 IL-12 IL-13 IL-15 IL-2 IL-4 IL-5 IL-7 KLF4 / KLF4-TAT Lin 28 / Lin 28-TAT M-CSF NT-3 NT-4 Oct 4 / Oct 4-TAT p16-INK4a / p16-INK4a TAT PIGF SDF-1 α (CXCL12) SDF-1 β (CXCL12) sDLL1 sDLL4 sFRP-1 TGFa TNF-R1 TNF-R2 TNF- α Vitronectin
Mesenchymal Stem Cells	EGF FGF basic PDGF	BMP's Noggin (BMP Inhibitor) TGF- β 's	
Hemangioblast (Hematopoietic Stem Cells)	FLT-3 Ligand IL-3 IL-6 SCF SCGF-a/b (new) Shh TPO WNT-3a	VEGF	
Endodermal Progenitor Cells		Activin's BMP-4 FGF basic FGF's FGF acidic HGF Oncostatin-M	
Neural Stem Cells	EGF FGF basic	BMPs CNTF FGF-8 GDNF Neuregulin-1 β -NGF Shh TGF-beta's	