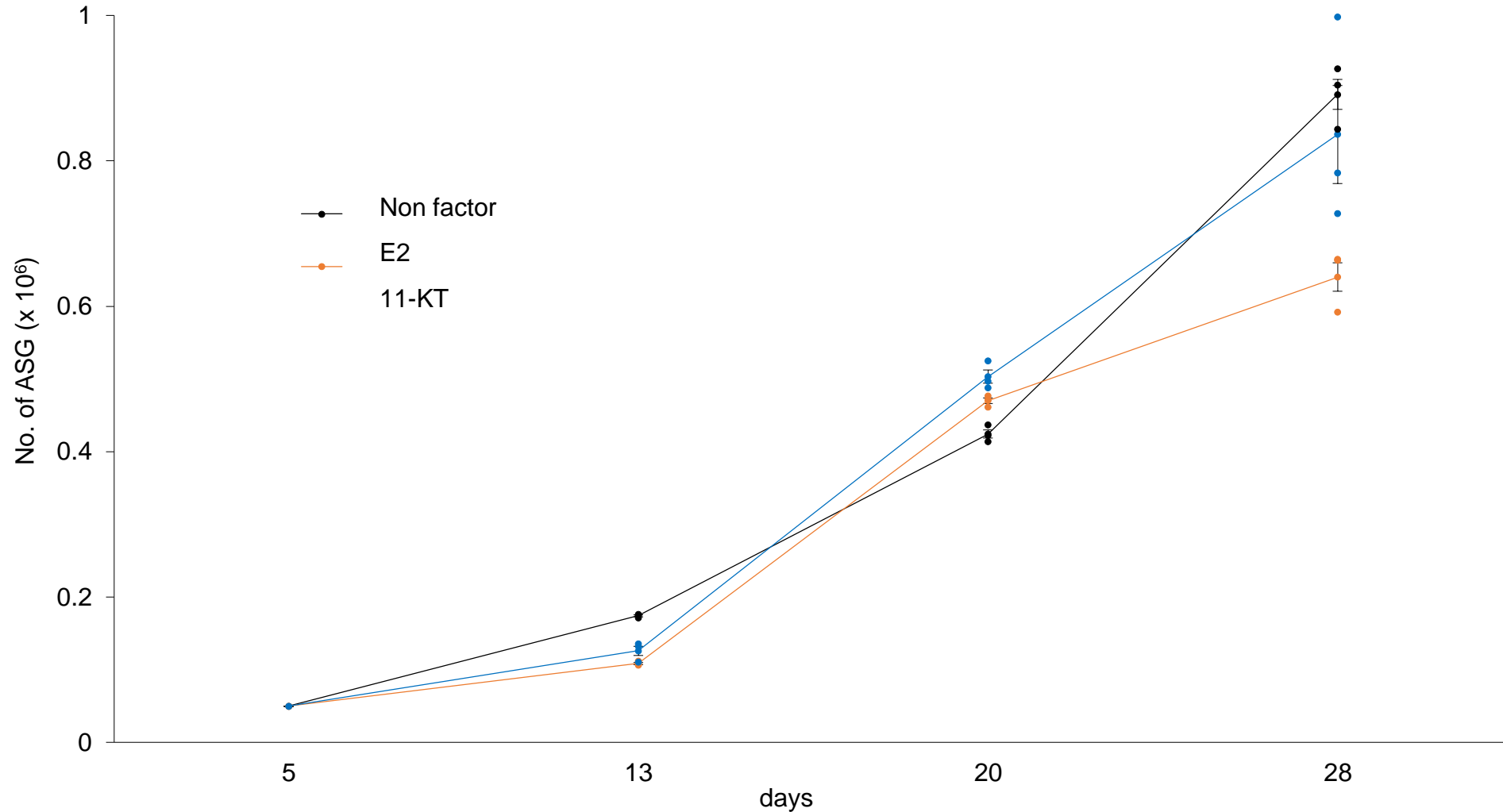


**Supplementary table 1.** Components of cell culture medium.

Medium name	L15	MEM $\alpha$	hESC	StemPro-34	MSC	NSC	TS-3
Basal medium	L15	MEM $\alpha$	DMEM/F12+GlutaMAX	StemPro-34 SFM	MSC SFM Basal Medium	KnockOUT DMEM/F12	DMEM/F12+GlutaMAX
HEPES (25 mM)	+ (pH 7.8)	-	-	-	-	-	-
Fetal bovine serum (%)	2	2	2	2	2	2	10
Bovine serum albumin (%)	0.5	0.5	1.8	0.5	0.5	0.5	1.8
L-aspartic acid (20 $\mu$ g/ml)	+	+	+	+	+	+	-
L-cystin (20 $\mu$ g/ml)	+	+	+	+	+	+	-
L-prolin (20 $\mu$ g/ml)	+	+	+	+	+	+	-
L-glutamic acid (20 $\mu$ g/ml)	+	+	+	+	+	+	-
Ascorbic acid (50 $\mu$ M)	+	+	+	+	+	+	+
Salmonids serum (0.25%)	+	+	+	+	+	+	-
Rainbow trout blood plasma (1%)	-	-	-	-	-	-	+
2-Mercaptoethanol ( $\mu$ M)	50	50	55	50	50	50	55
human bFGF (ng/ml)	1	1	8	1	1	1	8
Rainbow trout embryonic extract (1 $\mu$ g/ml)	+	+	+	+	+	+	-
Chemically Defined Lipid Concentrate (0.1%)	+	+	+	+	+	+	+
Z-VAD-FMK (40 $\mu$ M)	-	-	-	-	-	-	+
Progesterone (100pg/ ml)	-	-	-	-	-	-	+
Penicillin (50 U/ml)	+	+	+	+	+	+	+
Ampicillin (50 $\mu$ g/ml)	+	+	+	+	+	+	+
Streptomycin (50 $\mu$ g/ml)	+	+	+	+	+	+	+
Stempro <sup>®</sup> hESC SFM Growth Supplement	-	-	+	-	-	-	+
Stempro <sup>®</sup> MSC SFM Supplement	-	-	-	-	+	-	-
StemPro-34 Nutrient Supplement	-	-	-	+	-	-	-
StemPro Neural Supplement	-	-	-	-	-	+	-

**Supplementary table 2.** Primer sequences used for PCRs.

<b>Primer name</b>	<b>Primer sequence</b>
<b>inhibinP-FW</b>	5'-TGAAAAGCTTAGTATTTGGTGAACAACA
<b>inhibinP-RV</b>	5'-TGAAGGATCCCCAGTCTGCATGGTTCAGAT
<b>vasa-FW</b>	5'-TCTTCAGAGAGATGGGGCAAGTCATC
<b>vasa-RV</b>	5'-TCCCATATCCAGGACCACACGCACATT
<b>dnd1-FW</b>	5'-AGATGTGGCTGCAGGAGACT
<b>dnd1-RV</b>	5'-GTTTCATCATGAGGCGGAACT
<b>nanos2-FW</b>	5'-GAATTCGATCGGGACTGAGA
<b>nanos2-RV</b>	5'-CAGAATGGGGCAGATGACTT
<b>hsd3b-FW</b>	5'-TTGGACTGGGCCATGTCTCT
<b>hsd3b-RV</b>	5'-ATGCTGCTGGTGTAGATGAAGGA
<b>fshr-FW</b>	5'-TGAAGCCATTCTGGACACTT
<b>fshr-RV</b>	5'-TGTTAGCACAATGGCAGTGA
<b>sox9b-FW</b>	5'-AGAGGTCAGCCCTTAGCACA
<b>sox9b-RV</b>	5'-GAGCCGTTGTTCCCAAGATA
<b>arb-FW</b>	5'-TACTGTCACCGAAACCTTGGA
<b>arb-RV</b>	5'-TGGTTGTGCAGGCAGAATTGGA
<b>clu-FW</b>	5'-AAAGCCTTCCGGTATGACCT
<b>clu-RV</b>	5'-TCAAACCTCCTCAGCTGCTT
<b>actb-FW</b>	5'-ACTACCTGATGAAGATCCTG
<b>actb-RV</b>	5'-TTGCTGATCCACATCTGTTG



**Supplementary figure 1. Effect of sex steroids on the number of ASGs.**

Effect of 11-ketotestosterone (1,000 pg/ml) and estradiol-17 $\beta$  (100 pg/ml) in the presence of a TSC feeder layer in human embryonic stem cell medium supplemented with 10% FBS and 1% trout blood plasma on the number of ASGs. Data are shown as the mean  $\pm$  SEM (n=3).