

Table 1: RT-PCR Primer Sequences

mIL-6 fwd	CTG ATG CTG GTG ACA ACC AC
mIL-6 rvs	GCC ACT CCT TCT GTG ACT CC
mNSE fwd	CAG GAC TTT GTC CGG AAC TAT C
mNSE rvs	CAG AGT GAC TAT GGC AGG TCA G
mPTHrP fwd	AAG GGC AAG TCC ATC CAA GA
mPTHrP rvs	CAG AGT CAG CAG CAC CAA GA
mbeta-actin fwd	GTG GGG CGC CCC AGG CAC CA
mbeta-actin rvs	CTT CCT TAA TGT CAC GCA CGA TTT C
mGATA3 fwd	GAT GTA AGT CGA GGC CCA AG
mGATA3 rvs	CAG GGA TGA CAT GTG TCT GG
mGATA4 fwd	CTG TGC CAA CTG CCA GAC TA
mGATA4 rvs	AAG AGT CCT GCT TGG AGC TG
hIL-6 fwd	GAA CTC CTT CTC CAC AAG CG
hIL-6 rvs	GAA TCC AGA TTG GAA GCA TCC
hNSE fwd	TAC CAG GAC TTT GTC AGG GAC T
hNSE rvs	GAG GAT GAG ACA GAG GTT CCA C
hPTHrP fwd	ACG ATG CAG CGG AGA CTG GTT
hPTHrP rvs	CCC TTC TAG CCC ACT CCC AGT CAC
h β -actin fwd	GGC ATC GTG ATG GAC TCC
h β -actin rvs	GCT GGA AGG TGG ACA GCG

*m=mouse; h=human

Table 2: Smad shRNA Sequences

shRNA mSmad1 Set1 fwd	CCG GGC ACT ATT CGG ATG AGC TTC GCT CGA GCG AAG CTC ATC CGA ATA GTG CTT TTT G
shRNA mSmad1 Set1 rvs	AAT TCA AAA AGC ACT ATT CGG ATG AGC TTC GCT CGA GCG AAG CTC ATC CGA ATA GTG C
shRNA mSmad1 Set2 fwd	CCG GAA AGG AGT CCA CCT TTA TTA CCT CGA GGT AAT AAA GGT GGA CTC CTT TTT TTT G
shRNA mSmad1 Set2 rvs	AAT TCA AAA AAA AGG AGT CCA CCT TTA TTA CCT CGA GGT AAT AAA GGT GGA CTC CTT T

shRNA mSmad1 Set3 fwd CCG GAC TAC CTC ATG TCA TTT ATT GCT CGA GCA
ATA AAT GAC ATG AGG TAG TTT TTT G

shRNA mSmad1 Set3 rvs AAT TCA AAA AAC TAC CTC ATG TCA TTT ATT GCT
CGA GCA ATA AAT GAC ATG AGG TAG T

shRNA mSmad5 Set1 fwd CCG GGC AAG TTT CTC ACA GGA AAG GCT CGA GCC
TTT CCT GTG AGA AAC TTG CTT TTT G

shRNA mSmad5 Set1 rvs AAT TCA AAA AGC AAG TTT CTC ACA GGA AAG GCT
CGA GCC TTT CCT GTG AGA AAC TTG C

shRNA mSmad5 Set2 fwd CCG GGG TGT ACG CTG AGT GTC TTA GCT CGA GCT
AAG ACA CTC AGC GTA CAC CTT TTT G

shRNA mSmad5 Set2 rvs AAT TCA AAA AGG TGT ACG CTG AGT GTC TTA GCT
CGA GCT AAG ACA CTC AGC GTA CAC C

shRNA mSmad5 Set3 fwd CCG GGC AAC TTT CAC CAT GGC TTC CCT CGA GGG
AAG CCA TGG TGA AAG TTG CTT TTT G

shRNA mSmad5 Set3 rvs AAT TCA AAA AGC AAC TTT CAC CAT GGC TTC CCT
CGA GGG AAG CCA TGG TGA AAG TTG C

shRNA mSmad8 Set1 fwd CCG GGC CTC AAG GTC TTC AAC AAC CCT CGA GGG
TTG TTG AAG ACC TTG AGG CTT TTT G

shRNA mSmad8 Set1 rvs AAT TCA AAA AGC CTC AAG GTC TTC AAC AAC CCT
CGA GGG TTG TTG AAG ACC TTG AGG C

shRNA mSmad8 Set2 fwd CCG GGA AAG GGT GTG CAT TTG TAC TCT CGA GAG
TAC AAA TGC ACA CCC TTT CTT TTT G

shRNA mSmad8 Set2 rvs AAT TCA AAA AGA AAG GGT GTG CAT TTG TAC TCT
CGA GAG TAC AAA TGC ACA CCC TTT C

shRNA mSmad8 Set3 fwd CCG GTT GCC TAC TAC GAA CTA AAC ACT CGA GTG
TTT AGT TCG TAG TAG GCA ATT TTT G

shRNA mSmad8 Set3 rvs AAT TCA AAA ATT GCC TAC TAC GAA CTA AAC ACT
CGA GTG TTT AGT TCG TAG TAG GCA A

*m=mouse

Table 3: PCR Primer Sequences

mIL-6 promoter -300bp fwd	AAC TTC GTG CAT GAC TTC AG
mIL-6 promoter -150bp rvs	ACT AGG GGG AAA AGT GCA G
mIL-6 promoter -150bp fwd	TGT GTC TTG CGA TGC TAA AGG
mIL-6 promoter -50bp fwd	TTA TCA AAT GTG GGA TTT TCC CA
mIL-6 promoter rvs	GGG CTC GAG GGC AGA ATG

*m=mouse

Supplementary Figure Legends

Figure 1. Induction of IL-6 expression by BMP-6 in THP-1 human monocyte cell line. As with RAW 264.7 and murine peritoneal macrophages, BMP-6 at 100 ng/ml induced IL-6 mRNA expression.

Figure 2. Knock-down of R-Smads by shRNA lentivirus. Clone #1 for Smad 1, #3 for Smad 5, and #1 for Smad 8 were selected for further studies.

Figure 3. Effect of SB203580 on phosphorylation of Smad1/5 by BMP-6. After pretreatment with increasing concentrations of SB203580 for 1h, cells were treated with 100 ng/ml BMP-6 for 1h. Immunoblot revealed that up to 10 μ M, SB203580 did not affect BMP6-induced phosphorylation of Smad1/5.

Figure 4. Knock-down of GATA4 by siRNA. RAW 264.7 was transfected with control, GATA3, and GATA4 siRNA. Semi-quantitative RT-PCR was used to measure the effect on the expression levels of GATA3 and GATA4 mRNA. The knockdown of GATA4 by siGATA4 was specific as there was no significant effect on GATA3 mRNA expression level.

Figure 5. Effect of dominant-negative GATA 4 (GATA4DN) on IL-6 expression in macrophages. Following transfection with GATA4DN, baseline induction of IL-6 was observed, suggesting that the transfection process itself can influence IL-6 expression. When treated with BMP-6, induction of IL-6 was no longer observed in cells expressing GATA4DN.

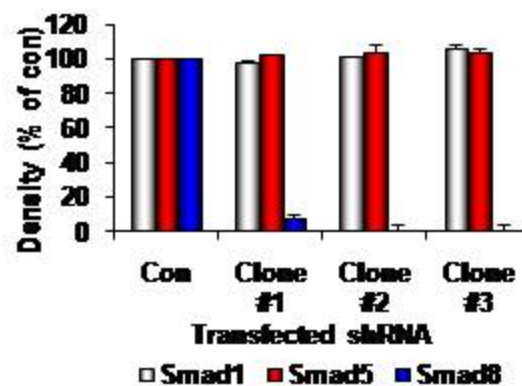
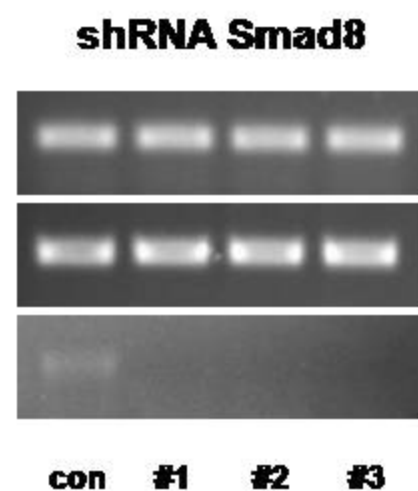
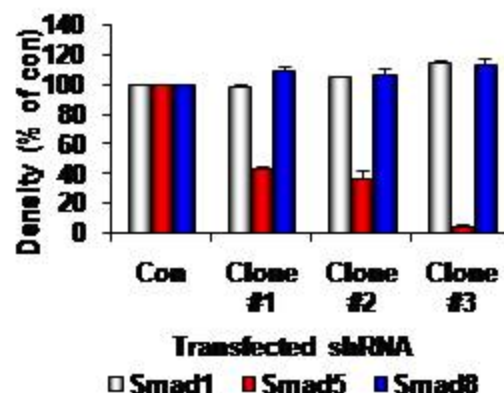
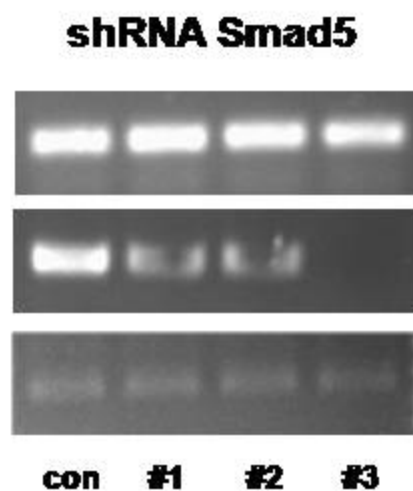
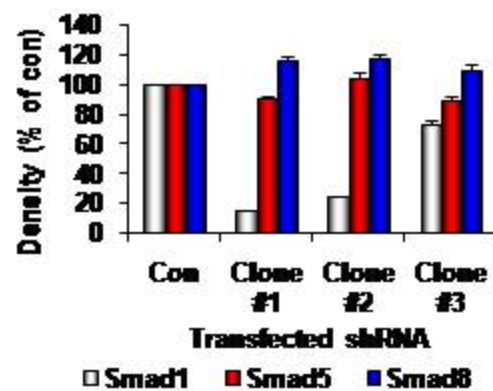
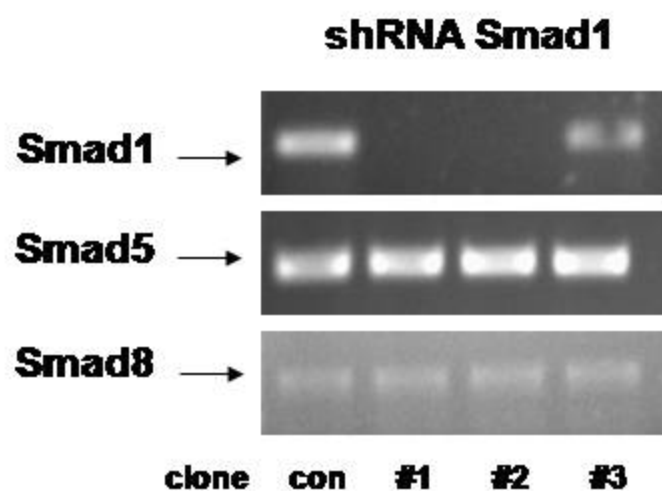
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Supplementary Fig 1

IL-6 induction by BMP-6 in THP-1 cells

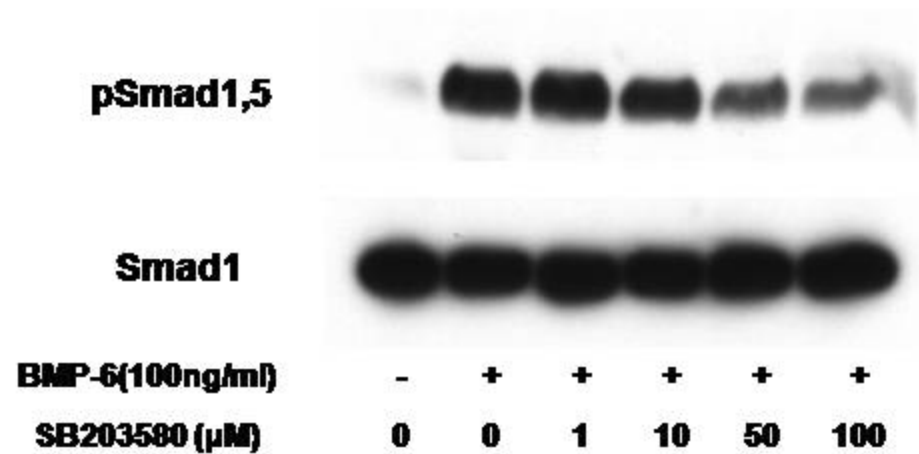


TPA	-	+	-	+	-	+
LPS	-	-	-	-	+	+
BMP-6	-	-	+	+	-	-

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Supplementary Fig 2



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Supplementary Fig 3



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Supplementary Fig 4

