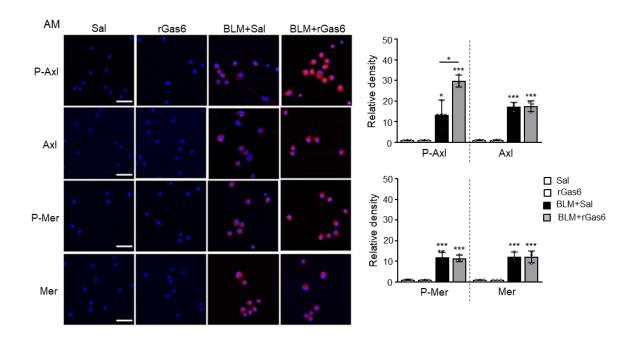
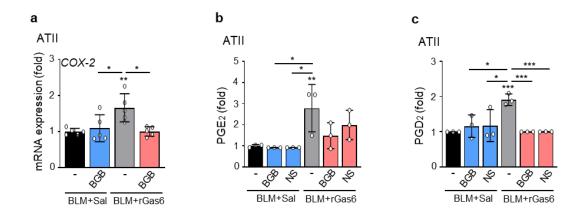


Supplementary Fig. 1. Enhanced Gas6 expression in BLM-induced lung

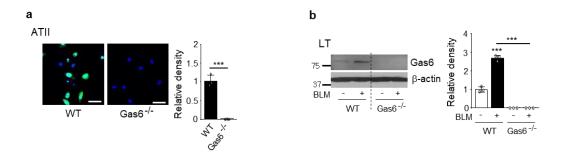
fibrosis. Mice were intratracheally instilled with BLM (5 U/kg). Either rGas6 (50 μg/kg) or saline (Sal) was intraperitoneally administered 1 day before BLM treatment and once every 2 days thereafter. Mice were euthanized 14 days after BLM treatment. (**a**) ELISA of Gas6 in BAL fluid (BALF), culture supernatants from ATII cells, and alveolar macrophages (AM). (**b**) qRT-PCR of Gas6 in ATII cell samples. (**c**) Immunoblot analysis of Gas6 in lung tissue. Below: Densitometric analysis of each band normalized to that of β-actin. (**d**) qRT-PCR of Gas6 in lung tissue. *P < 0.05, **P < 0.01, ***P < 0.001 compared with Saline or rGas6. Data were obtained from three (**a** right) or five replicates (**a** middle, **b**) per condition with cells pooled from two mice per replicate (means ± SEM). Values represent the means ± SEM of results from three (**c** below) or five mice (**a**, **d**) per group.



Supplementary Fig. 2. Enhanced activation of AxI in alveolar macrophages induced by rGas6 administration. Mice were intratracheally instilled with BLM (5 U/kg). Either rGas6 (50 μ g/kg) or saline (Sal) was intraperitoneally administered 1 day before BLM treatment and once every 2 days thereafter. Mice were euthanized 14 days after BLM treatment. Left: Immunofluorescence staining for phospho-AxI (red), total AxI (red), phospho-Mer (red), and total Mer (red) in alveolar macrophages. Images were captured at 400× magnification. Right: Quantification of phospho-AxI, total AxI, phospho-Mer, and total Mer staining. Imaging medium: Vectashield fluorescence mounting medium containing DAPI. Scale bars: 20 μ m. Data were obtained from three replicates per condition with cells pooled from two mice per replicate. Values represent the means \pm SEM. *P < 0.05, ***P < 0.001 compared with saline control or rGas6.



Supplementary Fig. 3. Enhanced COX-2-derived PGE₂ and PGD₂ production induced by Gas6-AxI signaling. Where indicated, the AxI inhibitor BGB324 (BGB, 5 mg/kg, *i.o.*) or COX-2 inhibitor NS-398 (NS, 5 mg/kg, *i.o.*) was co-administered with rGas6 1 day before BLM treatment and then administered once every 2 days thereafter. Mice were euthanized 14 days following BLM treatment. (a) qRT-PCR of COX-2 in ATII cells. (b, c) PGE₂ or PGD₂ levels in culture supernatants from ATII cells were measured using an enzyme immunoassay. Data were obtained from three (b, c) or five replicates (a) per condition with cells pooled from two mice per replicate. Values represent the means \pm SEM. *P < 0.05, **P < 0.01, ***P < 0.001 compared with saline control or rGas6.



Supplementary Fig. 4. Gas6 expression in ATII cells and lung tissue in WT and Gas6^{-/-} mice. (a) Left: immunofluorescence staining for Gas6 (green) in primary ATII cells from WT and GAS6^{-/-} mice. Right: quantification of Gas6 staining. Original magnification: $400\times$. Scale bars: $20~\mu$ m. Imaging medium: Vectashield fluorescent mounting medium containing DAPI. (b) Immunoblot analysis of Gas6 in lung tissue from WT and Gas6^{-/-} mice 14 days after BLM treatment. Right: Densitometric analysis of each band normalized to that of β-actin. ***P < 0.001 compared with saline control or for WT vs. Gas6^{-/-} mice. Data were obtained from three replicates per condition with cells pooled from two mice per replicate (a *right*) or from three mice in each group (b *right*). The data are shown as the means ± SEM.

Table S1. Primer sequences

Target gene Forward (5'-3')		Reverse (5'-3')		
Cdh1	GCACTCTTCTCCTGGTCCTG	TATGAGGCTGTGGGTTCCTC		
Cdh2	CCTCCAGAGTTTACTGCCATGAC	CCACCACTGATTCTGTATGCCG		
Acta2	CCACCGCAAATGCTTCTAAGT	GGCAGGAATGATTTGGAAAGG		
Col1a1	CAAGAAGACATCCCTGAAGTC	ACAGTCCAGTTCTTCATTGC		
Fn1	CACGATGCGGGTCACTTG	CTGCAACGTCCTCTTCATTCTTC		
COX-2	GGGAGTCTGGAACATTGTGA	GTGCACATTCTAAGTAGGTG		
COX-1	CGATCTGGCTTCGTGAAC	GAGCTGCAGGAAATAGCC		
Gas6	CCCCGTGATTAGACTACGC	ATCCAGGTGCTGTCTGAACG		
Snai1	CCCAAGGCCGTAGAGCTGA	GCTTTTGCCACTGTCCTCATC		
Zeb1	ATTCAGCTACTGTGAGCCCTGC CATTCTGGTCCTCCACAG			
Twist1	TCGACTTCCTGTACCAGGTCCT	CCATCTTGGAGTCCAGCTCG		
Has2	CGGTCGTCTCAAATTCATCTG	ACAATGCATCTTGTTCAGCTC		
CD44	AGCGGCAGGTTACATTCAAA	CAAGTTTTGGTGGCACACAG		
MMP9	TGGCTTTTGTGACAGGCACTT	CCCGACACAGTAAGCATTC		
MMP12	ATGAGGCAGAAACGTGGACT	TTTGGATTATTGGAATGCTGC		
MMP14	GTGAGCGTTGTGTGTGGGTA	CCCAAGGCAGCAACTTCAG		
HPRT	CCAGTGTCAATTATATCTTCAAC	CAGACTGAAGAAGCTACTGTAATG		

Table S2. List of antibodies

Antigen	Vendor	Cat.No	Source	Species cross-reactivity	Application	Dilution
E-cadherin	Cell signaling	#14472	Mouse monoclonal	H,M,R	WB,IHC,IF	1:1000 1:200
N-cadherin	Cell signaling	#13116	Rabbit polyclonal	H,M,	WB	1:1000
α-SMA	abcam	ab7817	Mouse monoclonal	H,M,R,Rabbit,P	WB,IHC,IF	1:1000 1:200
S100A4	abcam	ab197896	Rabbit monoclonal	H,M,R	IHC	1:200
β-actin	Santa cruz	sc-69879	Mouse monoclonal	Broad species	wB	1:1000
Col1	GeneTex	GRX82721	Rabbit polyclonal	H,M,R	wB	1:1000
Fn	abcam	ab2413	Rabbit polyclonal	H,M	WB	1:1000
p-AxI	Mybiosource	#MBS001060	Rabbit polyclonal	H,M,R	WB,IF	1:1000 1:200
AxI	abnova	PAB15888	Rabbit polyclonal	H,M,R	WB,IF	1:1000 1:200
p-Mer	Fab gennix	PMKT-140AP	Rabbit polyclonal	H,M,M,R	WB,IF	1:1000 1:200
Mer	Santa cruz	sc-365499	Mouse monoclonal	H,M,R	WB,IF	1:1000 1:200
Mer	abcam	ab300136	Rabbit monoclonal	H,M,R	WB,IF	1:1000 1:200
COX-2	Cell signaling	#4842	Rabbit polyclonal	H,M	WB	1:1000
COX-1	Santa cruz	sc-19998	Mouse monoclonal	H,M.R	WB	1:1000
Gas6	GeneTex	GTX64470	Rabbit polyclonal	H,M	WB	1:1000
Mouse IgG (HRP)	GeneTex	GTX213111	Goat	Not applicable	WB	1:5000
Rabbit IgG (HRP)	GeneTex	GTX213110	Goat	Not applicable	WB	1:5000
Rabbit IgG (Alexa 488)	Thermo fisher scientific	A11034	Goat	Not applicable	IHC,IF	1:200
Rabbit IgG (Alexa 594)	Thermo fisher scientific	A11012	Goat	Not applicable	IHC.IF	1:200
mouse IgG (Alexa 488)	,	16-240	Goat	Not applicable	IHC,IF	1:200
mouse IgG (Alexa 594)	Thermo fisher scientific	A11032	Goat	Not applicable	IHC.IF	1:200