



Figure S1. Specificity and neutralizing activity of FSTL1-neutralizing antibody. (A and B) Primary lung fibroblasts from C57BL/6J mice ($n = 3$) were treated with 1 $\mu\text{g}/\text{ml}$ anti-FSTL1 mAb (1F12 or 22B6) or control IgG1 1 h before 5 ng/ml TGF- β 1 treatment for 24 h. *Col1a1* (A) and *fibronectin* (*Fn1*; B) mRNA expression were determined by qRT-PCR. *, $P < 0.05$. (C and D) Kinetic analyses of the interaction of 22B6 mAb with FSTL1 (C) or Follistatin (D) by SPR. The y axis of the sensorgram is denoted as the RU signal, whereas the time (in seconds) is represented on the x axis. A series of concentrations of FSTL1 (C) or Follistatin (D) were injected at a flow rate of 10 $\mu\text{l}/\text{min}$. (E) FSTL1 (top)-, TGF- β 1 (middle)-, or Follistatin (FS; bottom)-22B6 complex was immunoprecipitated by protein G agarose and subjected to Western blot analysis of FSTL1, TGF- β 1, and Follistatin. The left lane is the positive control by recombinant protein. (F) COS-7 cells were transfected with pcDNA3.1 or pc-Fstl1 plasmid and then treated with 1 $\mu\text{g}/\text{ml}$ 22B6 mAb or control IgG1 for 48 h, and supernatants were assayed for IL-6 by ELISA. **, $P < 0.01$. (G) A549 cells were treated with 1 $\mu\text{g}/\text{ml}$ 22B6 or control IgG1 1 h before 100 ng/ml FSTL1 or 20 ng/ml BMP4 treatment for 24 h. qRT-PCR analysis of *SFTPC* mRNA expression is shown. *, $P < 0.05$; **, $P < 0.01$. (H) Primary NRVMs from a Sprague-Dawley rat ($n = 5$) were treated with 1 $\mu\text{g}/\text{ml}$ 22B6 or control IgG1 1 h before 100 μM PE and 100 ng/ml FSTL1 treatment for 24 h. Morphological changes were observed in phase contrast light microscopy. Representative images are shown. Bars, 100 μm . (I) Quantitative analysis of H presents mean cell surface area of myocytes. *, $P < 0.05$; **, $P < 0.01$. The experiments were performed once. (A, B, and E–H) The experiments were performed three times. (C and D) The experiments were performed twice with similar results. (A, B, F, G, and I) Error bars indicate mean \pm SEM.

Table S1. Clinical characteristics of the patients with IPF and donors

Patient	Nos.	Age	Sex	Smoking	Pathology	FEV1
		<i>yr</i>				<i>%</i>
IPF	IPF-1	67	Female	Yes	IPF/UIP	76.4
	IPF-2	66	Female	Yes	IPF/UIP	47.6
	IPF-3	63	Male	Yes	IPF/UIP	38.5
	IPF-4	67	Male	Yes	IPF/UIP	68
	IPF-5	53	Male	Yes	IPF/UIP	64
CTL	CTL-1	20	Male	Yes	—	82
	CTL-2	51	Male	Yes	—	96.1
	CTL-3	54	Male	Yes	—	85.5
	CTL-4	44	Male	Yes	—	61.1
	CTL-5	74	Male	Yes	—	67.4

CTL, patients or donors with normal lung tissue samples; FEV1, forced expiratory volume; UIP, usual interstitial pneumonia; —, normal pathology.