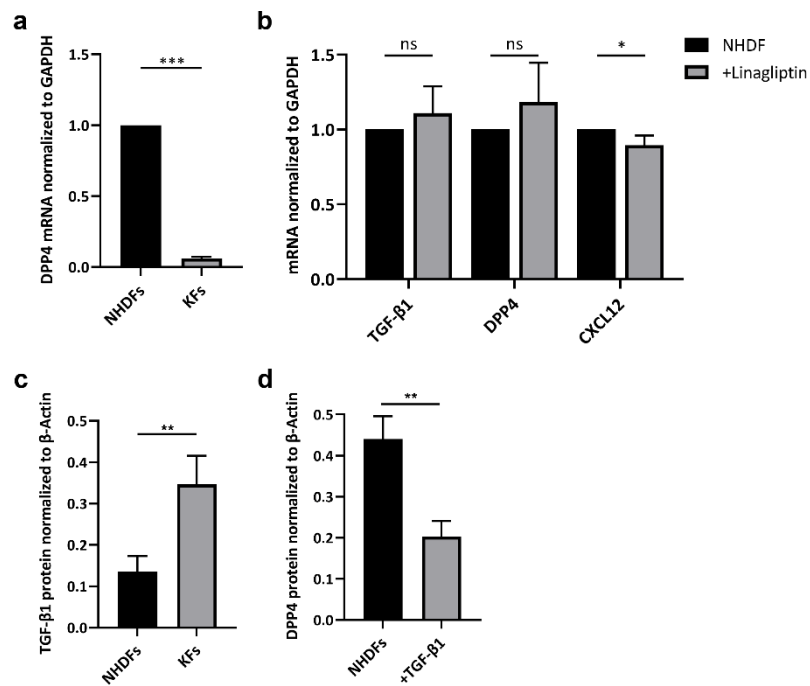


Supplement Fig.S1

a. Statistical analyzes of CXCL12 and DPP4 staining density in mature scar tissue and different sites of keloid scar.

b. Quantification of DPP4 activity (microunit/ml) and CXCL12 (pg/ml) in plasma from health subjects and keloid patients. Correlation analysis of DPP4 activity and CXCL12 was performed in each group. Data for 9 healthy controls and 11 patients with KD.



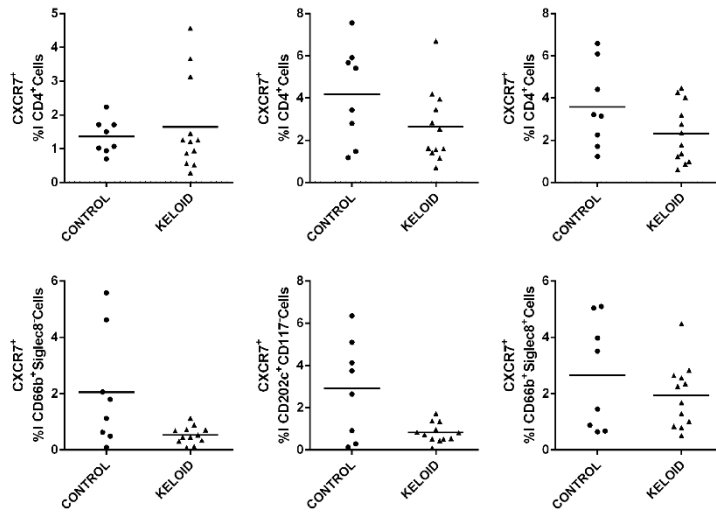
Supplement Fig.S2

a. Real-time PCR analyses of DPP4 in normal fibroblasts and keloid fibroblasts. ***=P < 0.001.

b. Real-time PCR analyses of TGF-β1, CXCL12 and DPP4 in normal fibroblasts after linagliptin treatment. ns= P>0.05, *=P < 0.05.

c. Densitometric analysis of TGF-β1 expression relative to β-Actin expression. Each bar represents the mean of three replicates of TGF-β1 band intensity normalized to β-Actin band intensity. **=P < 0.01.

d. Densitometric analysis of DPP4 expression relative to β-Actin expression. Each bar represents the mean of three replicates of DPP4 band intensity normalized to β-Actin band intensity. **=P < 0.01.



Supplement Figure S3

Expression of CXCR7 among circulating immune cells in keloid patients and healthy subjects

Table S1. Demographic characteristics

No.	Gender	Age	Diagnosis	Location	Duration	Cause
K9	Female	31	Keloid	Chest	37	Acne
K10	Female	25	Keloid	Back	20	Acne
K12	Female	28	Keloid	Chest	42	Acne
K13	Female	21	Keloid	Ear	18	Trauma
K15	Female	26	Keloid	Abdomen	29	Trauma
K17	Male	22	Keloid	Chest	31	Acne
K19	Female	29	Keloid	Face	36	Acne
K20	Female	21	Keloid	Monsveneris	41	Acne
K21	Female	28	Keloid	Chest	45	Acne
K25	Male	23	Keloid	Chest	12	Surgery
K24	Female	22	Keloid	Monsveneris	22	Acne
K67	Male	32	Keloid	Chest	41	Acne
K6	Male	29	Keloid	Axilla	37	Trauma
K9	Female	28	Keloid	Shoulder	24	Trauma
K30	Male	22	Keloid	Chest	22	Trauma
K37	Female	24	Keloid	Chest	22	Surgery
K38	Female	30	Keloid	Shoulder	23	Acne
M71	Female	25	Mature Scar	Shoulder	33	Trauma
M72	Female	27	Mature Scar	abdomen	8	Surgery
M73	Male	28	Mature Scar	abdomen	11	Surgery
M77	Female	22	Mature Scar	Face	10	Surgery
M78	Female	30	Mature Scar	abdomen	6	Surgery
M79	Female	22	Mature Scar	Leg	6	Trauma
M82	Female	26	Mature Scar	Sternum	7	Surgery
M90	Male	28	Mature Scar	abdomen	11	Surgery
M94	Male	29	Mature Scar	abdomen	2	Trauma
M96	Female	24	Mature Scar	Shoulder	3	Trauma
M101	Female	23	Mature Scar	face	1	Surgery
M102	Female	30	Mature Scar	face	1	Surgery
M111	Female	29	Mature Scar	face	2	Surgery

Table S2. Primers

Gene	Forward	Reverse
TGFB1	CAATTCCTGGCGATACCTCAG	GCACAACTCCGGTGACATCAA
CXCL12	ATTCTCAACACTCCAAACTGTGC	ACTTTAGCTTCGGGTCAATGC
DPP4	AGTGGCACGGCAACACATT	AGAGCTTCTATCCCGATGACTT
ACTB	CATGTACGTTGCTATCCAGGC	CTCCTTAATGTCACGCACGAT
GADPH	GGAGCGAGATCCCTCCAAAAT	GGCTGTTGTCATACTTCTCATGG

Table S3. Antibodies

Target	Host	Clone	Format	Company	Cat.no.	Appl.
CXCL12	Mouse	79018		R&D	MAB350	IHC
DPP4	Goat	Polyclonal		R&D	AF1180	IHC/IF
DPP4	Rabbit	EPR5883		Abcam	ab129060	WB
DPP4	Mouse	BA5b	PE	Biologend	302705	FCM
TGF-B1	Mouse	3C11		Santa Cruz	sc-130348	WB/IF
p-Smad2	Rabbit	138D4		CST	3108	WB
smad2	Rabbit	D43B4		CST	5339	WB
S100A4	Rabbit	EPR2761		Abcam	ab124805	IF
CXCR4	Mouse	44716		R&D	MAB172	IHC/IF
CXCR4	Rabbit	UMB2		Abcam	ab124824	IHC/IF
CXCR4	Goat	Polyclonal		Abcam	ab1670	IHC/IF
CXCR7	Mouse	11G8		R&D	MAB42273	IHC/IF
CXCR7	Rabbit	Polyclonal		Proteintech	20423-1-AP	IHC/IF
CD3	Rabbit	SP7		MXB	Kit-0003	IF
CD20	Mouse	L26		MXB	Kit-0001	IF
CD68	Mouse	KP1		MXB	Kit-0026	IF
CD117	Rabbit	YR145		Abcam	ab32363	IF
CD45	Mouse	HI30	BUV395	BD	563792	FCM
CD184	Mouse	12G5	BV785	Biologend	306530	FCM
CD187	Mouse	10D1	BV421	BD	566234	FCM
CD4	Mouse	SK3	BUV496	BD	564651	FCM
CD8	Mouse	SK1	APC-H7	BD	561423	FCM
CD20	Mouse	2H7	BV650	BD	563779	FCM
CD1c	Mouse	F10	PE	BD	564900	FCM
CD14	Mouse	M5E2	AF700	BD	557923	FCM
CD117	Mouse	YB5.B8	PERCP- CY5.5	BD	562094	FCM
CD66b	Mouse	G10F5	AF647	BD	561645	FCM
CD203c	Mouse	NP4D6	BV510	Biologend	324622	FCM
Siglec-8	Mouse	7C9	PE-CY7	Biologend	347112	FCM