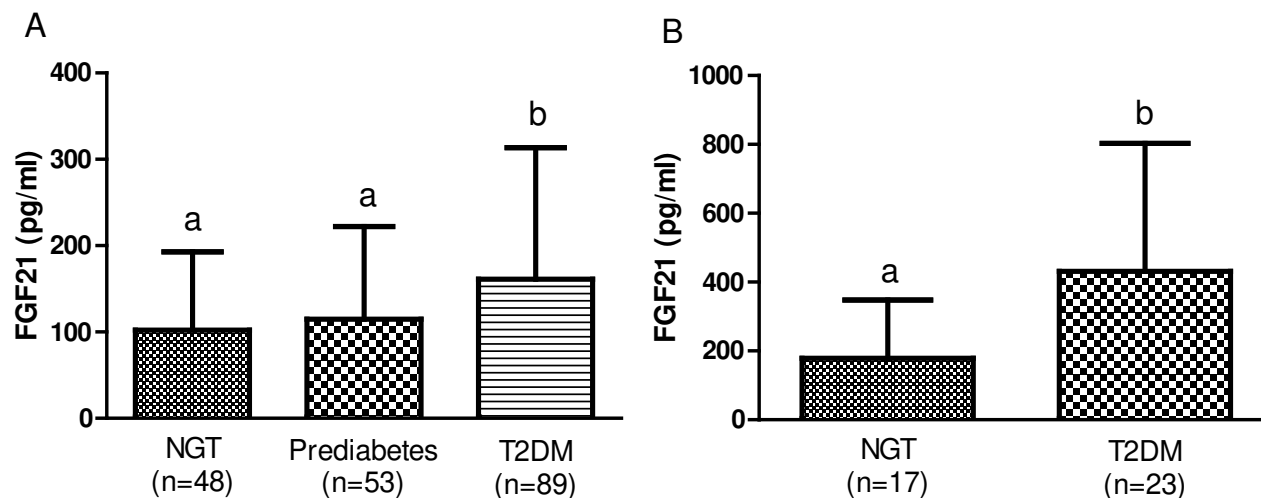


Supplemental Figure 1 – Plasma fibroblast growth factor 21 levels according to glucose metabolism status. A: Subjects who referred from a health examination center (Cohort 1); B: Subjects who underwent coronary artery bypass graft surgery (Cohort 2). NGT, normal glucose tolerance; PreDM, pre-diabetic patients; T2DM, patients with type 2 diabetes mellitus. ^{a, b} Significant differences ($P < 0.05$)



Supplemental Figure 2 – Correlations among various types of ectopic fat and FGF21 levels. A: All groups; B: normal glucose tolerance (NGT); C: pre-diabetic patients (preDM); D: type 2 diabetes mellitus group (T2DM).

A

r p-value	Subcutaneous fat	Visceral fat	Epicardial fat	Intrahepatic fat	Intramuscular fat	Plasma FGF21
Subcutaneous fat		0.206	0.156	0.226	0.399	0.029
Visceral fat	0.005		0.612	0.321	0.319	0.150
Epicardial fat	0.036	<0.001		0.246	0.309	0.189
Intrahepatic fat	0.009	<0.001	0.004		0.112	0.117
Intramuscular fat	<0.001	<0.001	<0.001	0.199		0.104
Plasma FGF21	0.722	0.061	0.019	0.218	0.195	

B

r p-value	Subcutaneous fat	Visceral fat	Epicardial fat	Intrahepatic fat	Intramuscular fat	Plasma FGF21
Subcutaneous fat		0.056	-0.129	0.170	0.523	-0.183
Visceral fat	0.707		0.690	0.330	0.274	0.035
Epicardial fat	0.389	<0.001		0.121	0.027	0.130
Intrahepatic fat	0.315	0.046	0.482		0.106	-0.104
Intramuscular fat	<0.001	0.060	0.859	0.532		-0.072
Plasma FGF21	0.264	0.831	0.435	0.586	0.663	

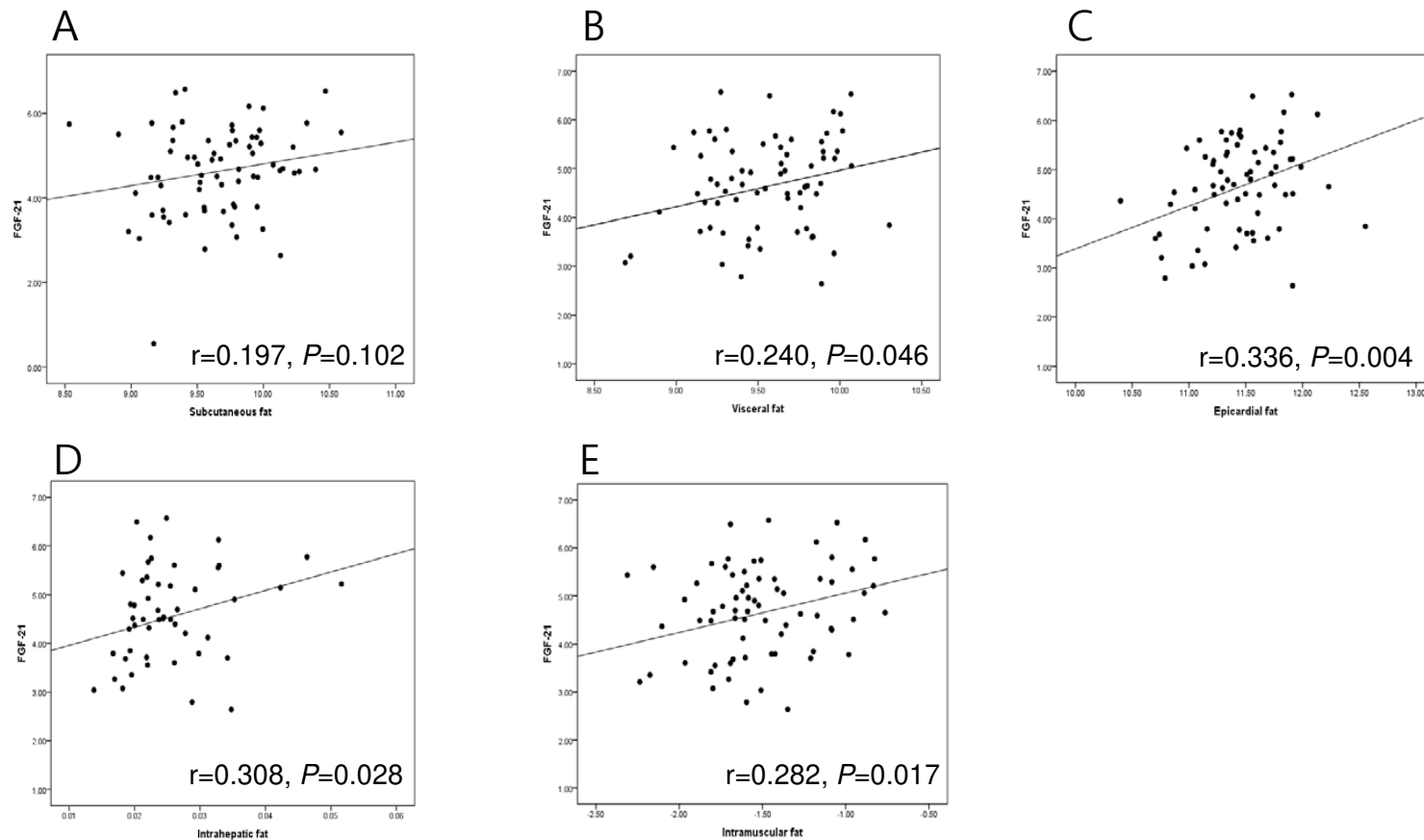
C

r p-value	Subcutaneous fat	Visceral fat	Epicardial fat	Intrahepatic fat	Intramuscular fat	Plasma FGF21
Subcutaneous fat		0.225	0.147	0.338	0.369	0.107
Visceral fat	0.113		0.587	0.198	0.236	0.071
Epicardial fat	0.308	<0.001		0.057	0.278	-0.039
Intrahepatic fat	0.047	0.255	0.742		-0.044	0.040
Intramuscular fat	0.008	0.096	0.050	0.803		0.017
Plasma FGF21	0.475	0.635	0.795	0.826	0.911	

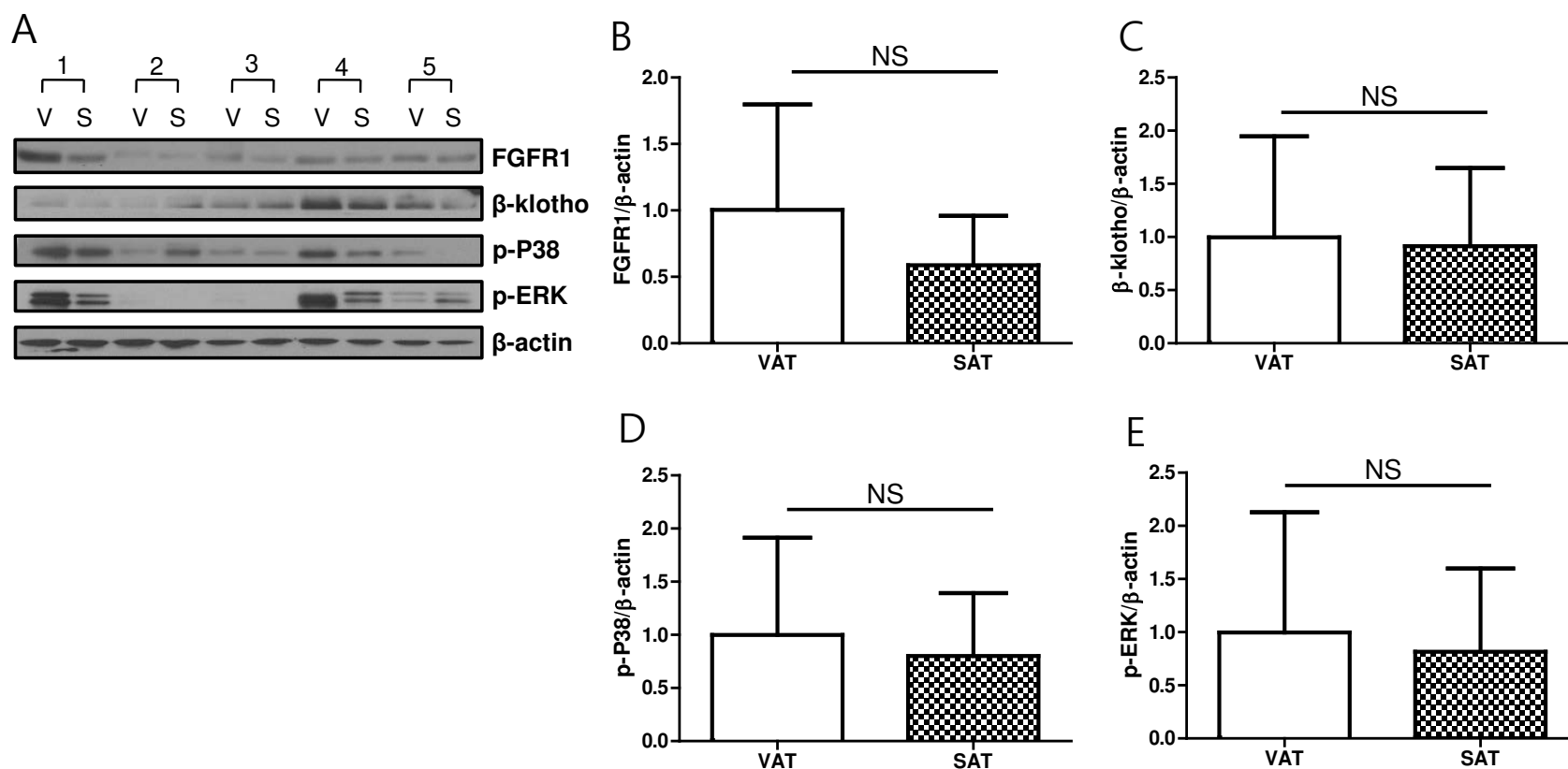
D

r p-value	Subcutaneous fat	Visceral fat	Epicardial fat	Intrahepatic fat	Intramuscular fat	Plasma FGF21
Subcutaneous fat		0.365	0.367	0.222	0.381	0.197
Visceral fat	0.001		0.535	0.311	0.367	0.240
Epicardial fat	0.001	<0.001		0.352	0.484	0.336
Intrahepatic fat	0.086	0.015	0.006		0.3156	0.308
Intramuscular fat	<0.001	<0.001	<0.001	0.227		0.282
Plasma FGF21	0.102	0.046	0.004	0.028	0.017	

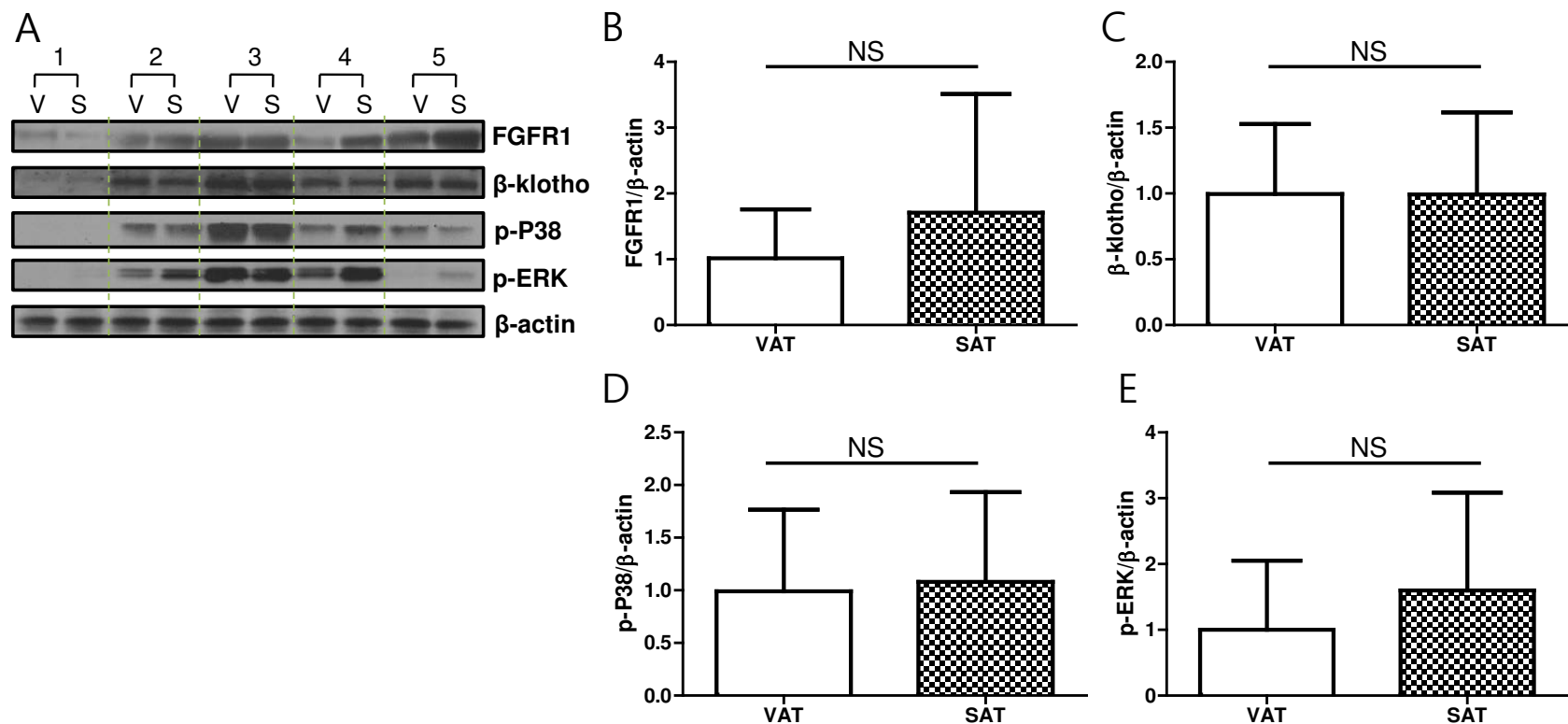
Supplemental Figure 3 – Correlation between ectopic fat and FGF-21 levels in type 2 diabetes mellitus (T2DM) patients. A: Subcutaneous fat, B: Visceral fat, C: Epicardial fat, D: Intrahepatic fat, E: Intramuscular fat.



Supplemental Figure 4 – Protein expression of the FGFR dimer and signaling components in visceral and subcutaneous fat tissue of the non-diabetic control group of subjects who underwent general abdominal surgery (Cohort 3). A: Western blot analysis, B: FGFR1, C: β -klotho, D: p-P38, E: p-ERK. V, VAT: visceral adipose tissue, S, SAT: subcutaneous adipose tissue. n=5/group. NS: nonsignificant.



Supplemental Figure 5 – Protein expression of the FGFR dimer and signaling components in visceral and subcutaneous fat tissue of the non-diabetic control group of subjects who underwent coronary artery bypass graft surgery (Cohort 2). A: Western blot analysis, B: FGFR1, C: β -klotho, D: p-P38, E: p-ERK. V, VAT: visceral adipose tissue, S, SAT: subcutaneous adipose tissue. n=5/group. NS: nonsignificant.



Supplemental Figure 6 –mRNA expression of FGFR dimer and signaling components in visceral and subcutaneous fat tissue A: Non-diabetic control group of subjects who underwent general abdominal surgery (Cohort 3) B: Non-diabetic control group of subjects who underwent coronary artery bypass graft surgery (Cohort 2) C: Type 2 diabetes mellitus group of subjects who underwent coronary artery bypass graft surgery (Cohort 2). V: visceral adipose tissue, S: subcutaneous adipose tissue. N=3/group. NS: nonsignificant.

