Supplementary Data

Targeting Myocardial Mitochondria-STING-Polyamine Axis Prevents Cardiac Hypertrophy in Chronic Kidney Disease

Wenhao Han, MD[a1]; Changhong Du, PhD[b1]; Yingguo Zhu, MS[a]; Li Ran, MS[a]; Yue Wang, MD[a]; Jiachuan Xiong, MD[a]; Yiding Wu, PhD[b]; Qigang Lan, MS[a]; Yaqin Wang, MS[a]; Liting Wang, MS[c], Junping Wang, PhD[b]; Ke Yang, PhD[a] and Jinghong Zhao, MD, PhD[a*]*

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Supplementary Figures 1-6

Table S1-S4

Test of Normality

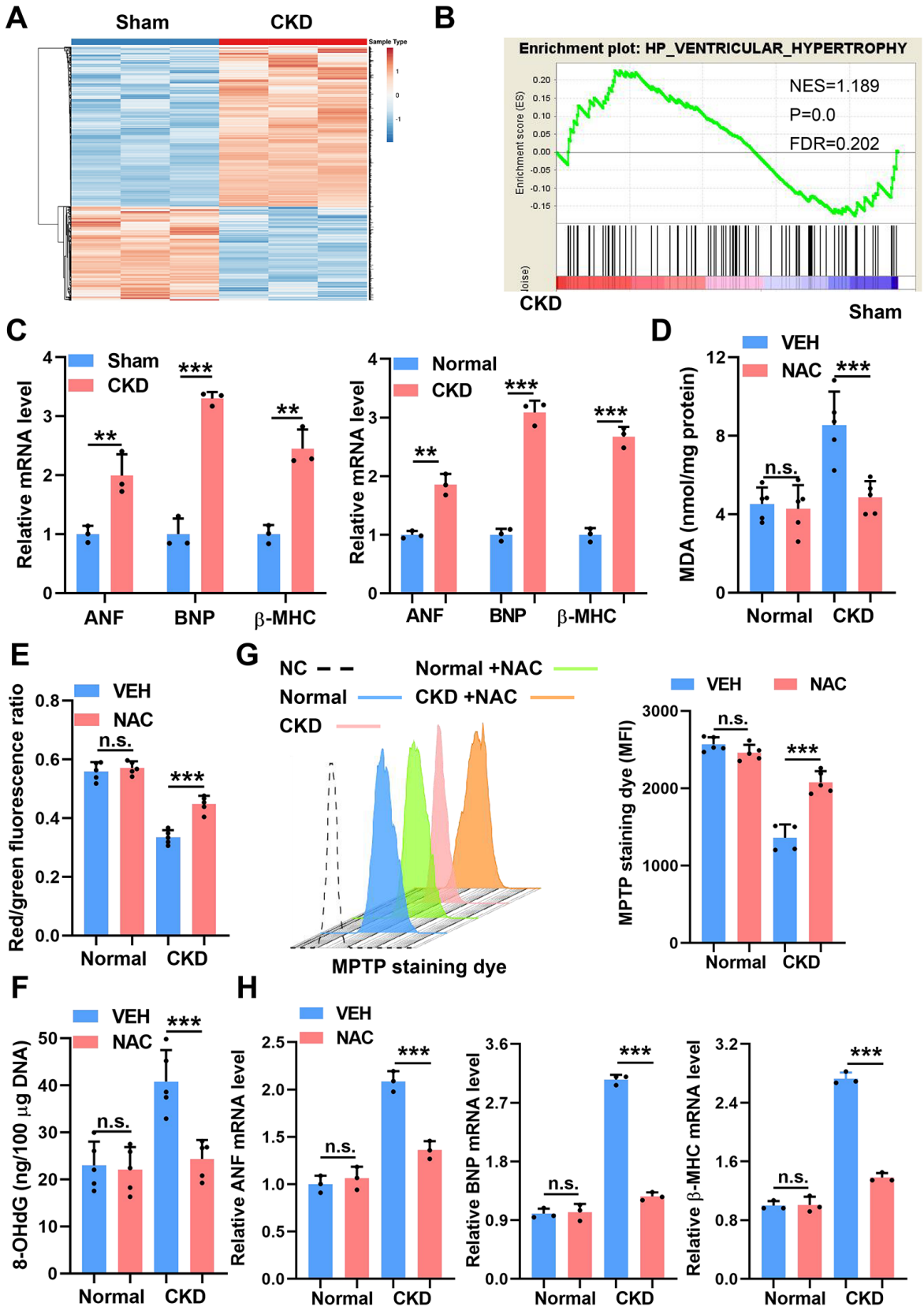
A
Sham
CKD
Sample Type
B
Enrichment plot: HP_VENTRICULAR_HYPERTROPHY
NES=1.189
P=0.0
FDR=0.202
Enrichment score (ES)
CKD
Sham
C
Sham
CKD
Relative mRNA level
ANF
BNP
β-MHC
Normal
CKD
D
VEH
NAC
MDA (nmol/mg protein)
n.s.
Normal
CKD
E
VEH
NAC
Red/green fluorescence ratio
n.s.
Normal
CKD
G
NC
Normal
CKD
Normal +NAC
CKD +NAC
MPTP staining dye
VEH
NAC
MPTP staining dye (MFI)
n.s.
Normal
CKD
F
VEH
NAC
8-OHdG (ng/100 μg DNA)
n.s.
Normal
CKD
H
VEH
NAC
Relative ANF mRNA level
Relative BNP mRNA level
Relative β-MHC mRNA level
n.s.
Normal
CKD

Figure S1. CKD-induced oxidative stress results in mitochondrial oxidative damage and cardiomyocyte hypertrophy. (A) The heat map shows greatly different gene expression profiles of myocardia from Sham and CKD mice. (B) GSEA analysis of gene sets associated with ventricular hypertrophy in the myocardia from CKD mice. (C) Relative mRNA levels of ANF, BNP and β-MHC in the myocardia and NRCMs. (D) The contents of MDA in NRCMs incubated with normal and CKD serums with or without NAC treatment. (E) Quantification of mitochondrial membrane potential in NRCMs incubated with normal or CKD serum with or without NAC treatment. (F) The contents of 8-OHdG in NRCMs incubated with normal and CKD serum with or without NAC treatment. (G) Representative flow cytometry plots and quantification of MPTP permeability in NRCMs incubated with normal and CKD serum with or without NAC treatment. (H) Relative mRNA levels of ANF, BNP and β-MHC in NRCMs incubated with normal and CKD serum with or without NAC treatment. Data are represented as mean ± SD and were analyzed by two-tailed Student's *t*-test (C) or by one-way ANOVO (D-H). n = 3 biologically independent experiments. n.s., no significance. ***P* <0.01, ****P* <0.001.

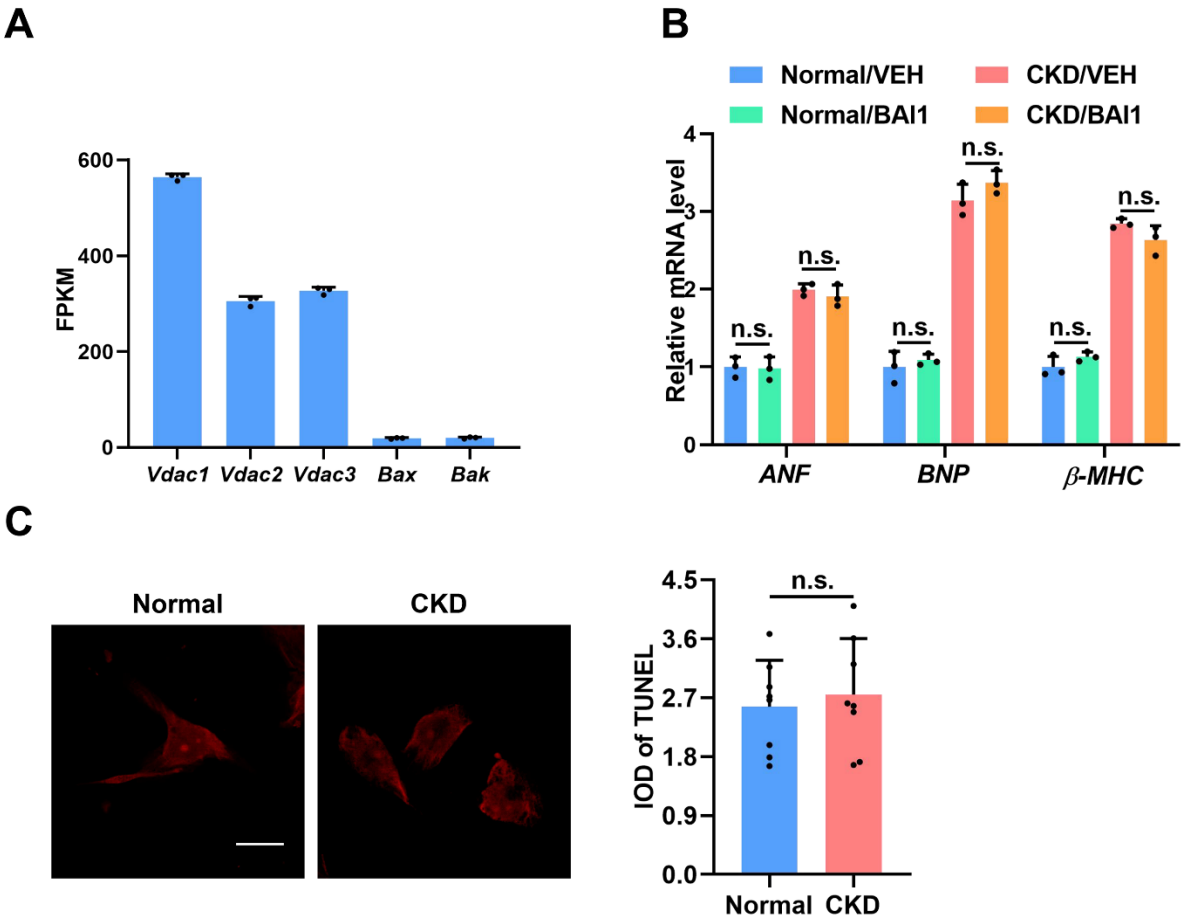

Figure S2. BAK/BAX is not responsible for CKD-induced MOMP in cardiomyocytes. (A) FPKMs of Vdac1, Vdac2, Vdac3, Bax and Bak in the myocardia from Sham mice. (B) Relative mRNA levels of ANF, BNP and β-MHC in normal and CKD serum-incubated NRCMs with or without BAI1 treatment. (C) Representative TUNEL staining in normal and CKD serum-incubated NRCMs. Scale bar, 20 μm. Data are represented as mean ± SD and were analyzed by one-way ANOVO (B) and two-tailed Student's t-test (C). n = 3 biologically independent experiments. n.s., no significance.

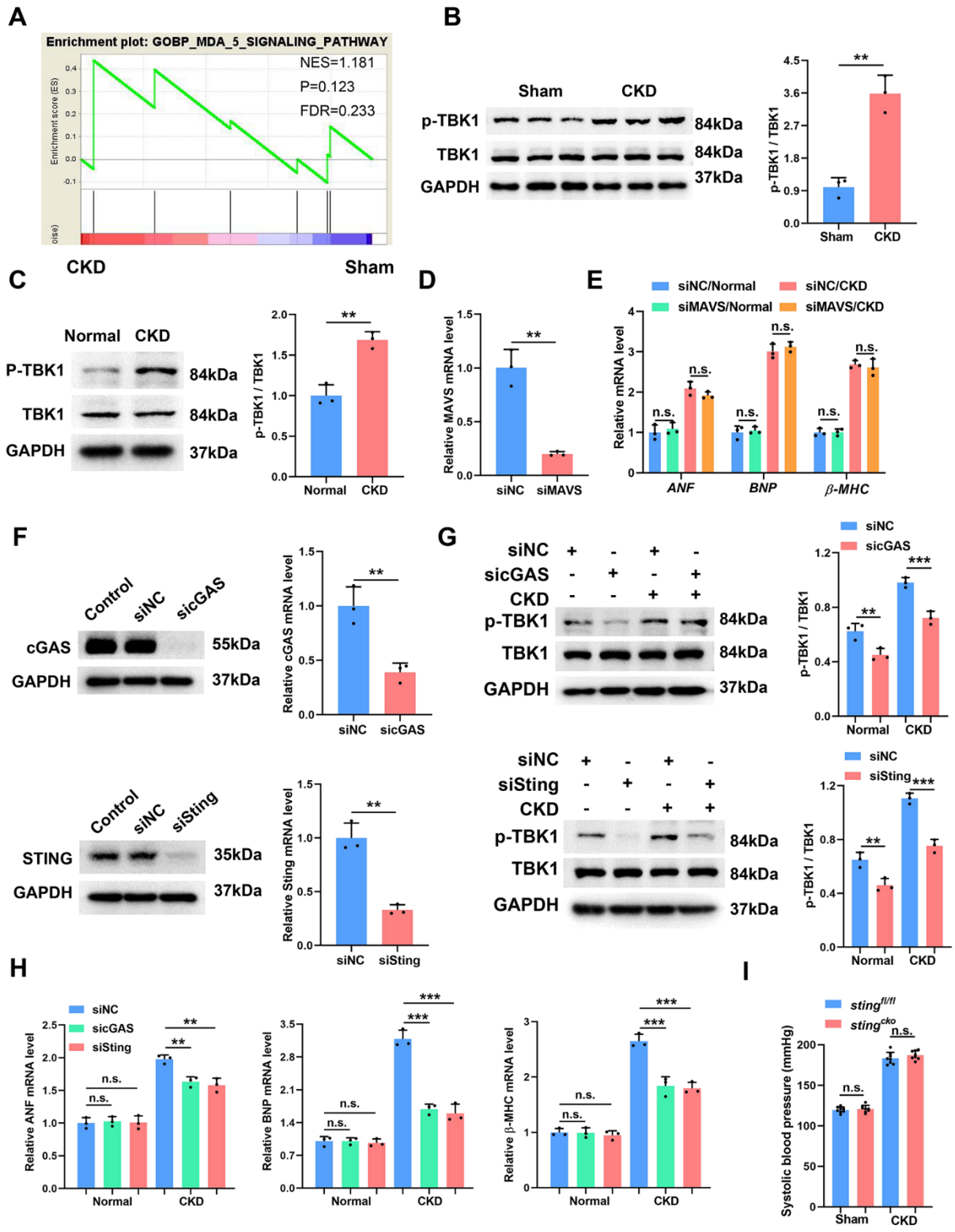

Figure S3. cGAS-STING pathway drives CKD-induced cardiac hypertrophy. (A) GSEA analysis of gene sets associated with MDA5 signaling pathway in the myocardia from CKD mice.

(B) Representative WB analysis of p-TBK1 in the myocardia from mice with or without CKD. (C) Representative WB analysis of p-TBK1 in NRCMs incubated with normal or CKD serum. (D) Representative mRNA expression levels of MAVS in NRCMs after RNAi. (E) Relative mRNA levels of ANF, BNP, and β-MHC in normal and CKD serum-incubated NRCMs with or without siMAVS treatment. (F) Representative protein and mRNA expression levels of cGAS and STING in NRCMs after RNAi. (G) Representativ**e** WB analysis of p-TBK1 in NRCMs incubated with normal or CKD serum with or without sicGAS or siSting treatment. (H) Relative mRNA levels of ANF, BNP, and β-MHC in normal and CKD serum-incubated NRCMs with or without sicGAS or siSting treatment. (I) Evolution of systolic blood pressure from $Sting^{cko}$ and $Sting^{fl/fl}$ mice with or without CKD. Data represent mean ± SD and were analyzed by two-tailed Student's t-test (B-D and F) or by one-way ANOVA (E and G-I). n = 3 biologically independent experiments. n.s., no significance. $^{**}P < 0.01$, $^{***}P < 0.001$.

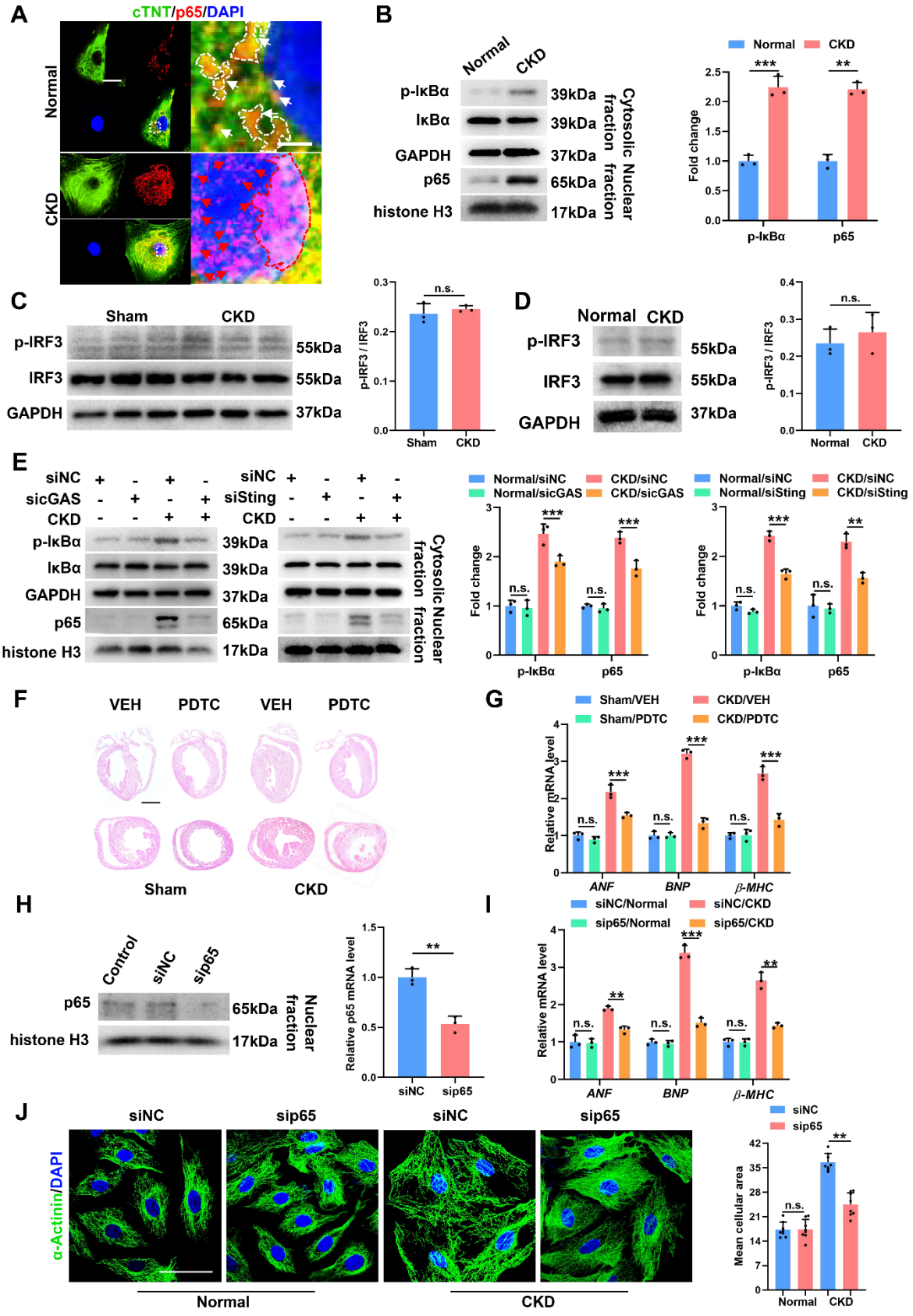
A
cTNT/p65/DAPI
Normal
CKD
B
Normal
CKD
p-IκBα
IκBα
GAPDH
p65
histone H3
39kDa
39kDa
37kDa
65kDa
17kDa
Cytosolic fraction
Nuclear fraction
Fold change
p-IκBα
p65
C
Sham
CKD
p-IRF3
IRF3
GAPDH
55kDa
55kDa
37kDa
p-IRF3 / IRF3
n.s.
D
Normal
CKD
E
siNC
sicGAS
siSting
CKD
Normal/siNC
CKD/siNC
Normal/siNC
CKD/siNC
Normal/siGAS
CKD/siGAS
Normal/siSting
CKD/siSting
F
VEH
PDTC
VEH
PDTC
Sham
CKD
G
Sham/VEH
CKD/VEH
Sham/PDTC
CKD/PDTC
Relative mRNA level
ANF
BNP
β-MHC
H
Control
siNC
sip65
p65
histone H3
65kDa
17kDa
Nuclear fraction
Relative p65 mRNA level
I
siNC/Normal
siNC/CKD
sip65/Normal
sip65/CKD
J
siNC
sip65
α-Actinin/DAPI
Normal
CKD
Mean cellular area

Figure S4.NFκB rather than IRF3 acts downstream of cGAS-STING pathway to drive CKD-induced cardiac hypertrophy. (A) Representative images of p65 and cTNT staining in NRCMs incubated with normal or CKD serum. The region marked by box is magnified in right panel. Cytoplasmic p65 is marked by white arrow, nuclear p65 is marked by red arrow. Scale bar, 20 μm in left panel, 4 μm in right panel. (B) Representative WB analysis of p-IkBα and p65 in NRCMs incubated with normal or CKD serum. (C-D) Representative WB analysis of p-IRF3 in the myocardia and NRCMs. (E) Representative WB analysis of p-IkBα and p65 in NRCMs incubated with normal and CKD serum with or without sicGAS and siSting treatment. (F) Representative HE staining of sagittal and midchamber sections of the hearts. Scale bar, 200 μm. (G) Relative mRNA levels of ANF, BNP and β-MHC in the myocardia from Sham and CKD mice with or without PDTC treatment. (H) Representative protein and mRNA expression levels of p65 in NRCMs after RNAi. (I) Relative mRNA levels of ANF, BNP, and β-MHC in NRCMs incubated with normal and CKD serum with or without sip65 treatment. (J) Representative images of α-Actinin staining in normal and CKD serum-incubated NRCMs with or without sip65 treatment. Scale bars, 20 μm. Data represent mean ± SD and were analyzed by two-tailed Student's t-test (B-D and H) or by one-way ANOVA (E, G, I and J). n = 3 biologically independent experiments. n.s., no significance. $^{**}P < 0.01$, $^{***}P < 0.001$.

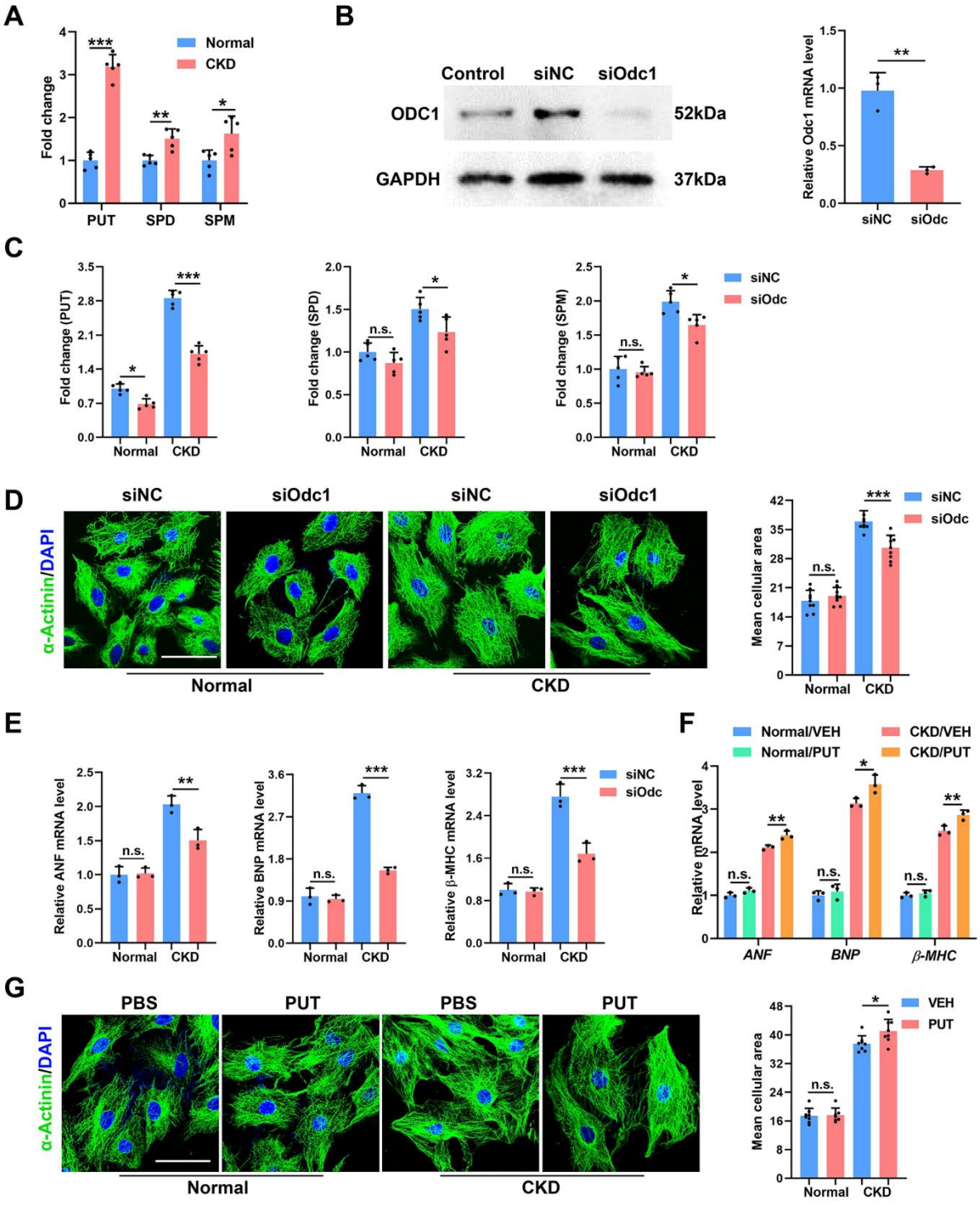

Figure S5. Myocardial ODC1-PUT metabolic flux is implicated in CKD-induced cardiac hypertrophy. (A) The contents of PUT, SPD, and SPM in NRCMs were detected using HPLC.

(B) Representative protein and mRNA expression levels of ODC1 in NRCMs after RNAi. (C) The contents of polyamine in normal and CKD serum-incubated NRCMs with or without siOdc1 treatment. (D) Representative images of α-Actinin staining in normal and CKD serum-incubated NRCMs with or without siOdc1 treatment. Scale bars, 20 μm. (E) Relative mRNA levels of ANF, BNP, and β-MHC in normal and CKD serum-incubated NRCMs with or without siOdc1 treatment. (F) Relative mRNA levels of ANF, BNP, and β-MHC in NRCMs incubated with normal and CKD serums with or without PUT supplementation. (G) Representative images of α-Actinin staining in normal and CKD serum-incubated NRCMs with or without PUT supplementation. Scale bars, 20 μm. Data represent mean ± SD and were analyzed by two-tailed Student's t-test (A-B) or by one-way ANOVA (C-G). n = 3 biologically independent experiments. n.s., no significance. **P* <0.05, ***P* <0.01, ****P* <0.001..

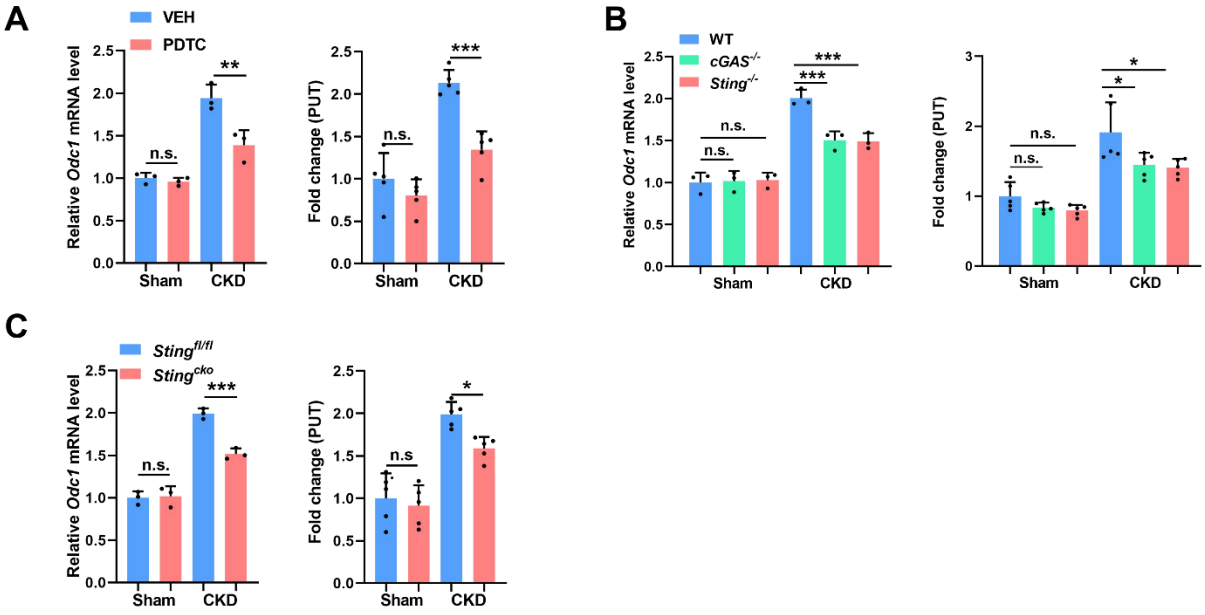

Figure S6. ODC1 expression is positively associated with STING-NFκB pathway activity in cardiomyocytes under CKD milieu. (A) Relative mRNA levels of Odc1 (left) and the contents of PUT (right) in the myocardia from sham and CKD mice with or without PDTC treatment. (B) Relative mRNA levels of Odc1 (left) and the contents of PUT (right) in the myocardia from *cGAS*$^{-/-}$ or *Sting*$^{-/-}$ mice with or without CKD. (C) Relative mRNA levels of Odc1 (left) and the contents of PUT (right) in the myocardia from *Sting*^{cko} or *Sting*$^{fl/fl}$ mice with or without CKD. Data represent mean ± SD and were analyzed by one-way ANOVA. n = 3 biologically independent experiments. n.s, no significance. **P* <0.05, ***P* <0.01, ****P* <0.001.

Table S1

Sequences of primers for Real-Time Quantitative PCR

Gene	Forward primer	Reverse primer
	Rat	
Gapdh	**GATGGTGAAGGTCGGTGTGA**	**CGGGATCTCGCTCCTGGAA**
β-Actin	**AGATCAAGATCATTGCTCCTCCT**	**ACGCAGCTCAGTAACAGTCC**
B2m	**GGACTCCAAGGCAGAACAGT**	**CAGACCCCAGCCTTTACACA**
ANF	**GGGAAGTCAACCCGTCTCA**	**GGGCTCCAATCCTGTCAAT**
BNP	**GACGGGCTGAGGTTGTTTTA**	**ACTGTGGCAAGTTTGTGCTG**
β-MHC	**TGACAGATCGGGAGAACCAG**	**CCGAACTGTCTTGGCATTGC**
Odc1	**ATGGGCAGCTTTACTAAGGAAGAG**	**GTCAAGCAGATACATGCTGAAACC**
Nd1	**GAACCCATACGCCCCCTAAC**	**GCTCGTAGGGCTCCGAATAG**
Nd2	**TACCCGAAGTCACCCAAGGA**	**AGGCGCCAACAAAGACTGAT**
Nd4	**ACGAACGAATTCACAGCCGA**	**AGGGGTGGTAGTGCTAGGTT**
Nd5	**AGCAATCTGTGCTCTCACCC**	**GCATGGGTGCAAATGTGGAG**
	Mice	
Gapdh	**TCTCTGCTCCTCCCTGTTCC**	**TACGGCCAAATCCGTTCACA**
ANF	**GTGCGGTGTCCAACACAGAT**	**TCCAATCCTGTCAATCCTACCC**
BNP	**GAGGTCACTCCTATCCTCTGG**	**GCCATTTCCTCCGACTTTTCTC**
β-MHC	**AGACTGTCAACACTAAGAGGGT**	**TGCCCCAAAATGGATTCGGAT**
Odc1	**GCCTTGATCGGATCGTGGAG**	**ATAGCTTCTGGCTCCTGGTTG**

Table S2

Sequences of siRNA

Name	Forward primer	Reverse primer
	Rat	
sicGAS	**GAAUCGAGCUAGAAGAAUATT**	**UAUUCUUCUAGCUCGAUUCTT**
siSting	**GCACAUUCGGCAAGAAGAATT**	**UUCUUCUUGCCGAAUGUGCTT**
siOdc1	**GAGAGGAUUAUCUAUGCAATT**	**UUGCAUAGAUAAUCCUCUCTT**
sip65	**GACUGUUGUCAUUCUGGAATT**	**UUCCAGAAUGACAACAGUCTT**
siMAVS	**GUCCAGAGGAGAAUGAGUATT**	**UACUCAUUCUCCUCUGGACTT**

Table S3

Sequences of ChIP

Name	Forward primer	Reverse primer
	Rat	
p65	**AATCACTCGTTCTTTCATTCACTCATTC**	**AAGCCAAACAAACAAACAAACAAACC**
	ACTATGTTGCCTTGGTTGGTCTG	**ATCCACCTGCCTCTGTCTCG**
	GTGGATTTCCTCTAGGGACCTCTG	**CGGGAGTGGTTGGATTAAAGGTATG**
	CTGCCGCAGGGAGTGTC	**ACGCACCAGCTCAAACCAG**
	GTGGTGTGGTGCGCGTG	**CGCACCAGCTCAAACCAG**
	GACTGGTGGTGTGGTGC	**GACGCACCAGCTCAAACC**
	Mouse	
	GCTTTCAGGCTTAGGCATACAGG	**ATTCTTCCTCGGCTTTCCATTCAG**
	CCATCCATCCTCCGCTTGC	**GCGGGAGTCGGCTGGTG**
	GATACGCCTGCCCCGCTAG	**CGCACCACATCACCAGTCC**
	TGTAGCCGTGGTTGGTCTGG	**CTGCCTCTGCCTCAAGAATGC**
	TATGTAGCCGTGGTTGGTCTGG	**TGGAACTCTACCTGCCTCTGC**
	ACTATGTAGCCGTGGTTGGTCTG	**CTCTACCTGCCTCTGCCTCAAG**

Table S4

Antibody	Origin	Catalog number	Assay
anti-α-Actinin	Cell Signaling Technology	Cat#69758s	IF
anti-GAPDH	Cell Signaling Technology	Cat#5174s	WB
anti-p-IκBα	Cell Signaling Technology	Cat#9246s	WB
anti-IκBα	Cell Signaling Technology	Cat#9242s	WB
anti-p65	Cell Signaling Technology	Cat#8242s	WB, IF, Chip
anti-histone H3	Cell Signaling Technology	Cat#4499s	WB
anti-ODC1	Santa Cruz Biotechnology	Cat#sc-390366	WB
anti-cGAS	Santa Cruz Biotechnology	Cat#sc-515777	WB, IF
anti-Sting	Cell Signaling Technology	Cat#13647s	WB
anti-DNA	Millipore	Cat#CBL186	IF
anti-8-OH-dG	Abcam	Cat#ab48508	IF
anti-cTNT	Bioss	Cat#bs-10648r	IF
Anti-TBK1	Cell Signaling Technology	Cat#38066s	WB
Anti-p-TBK1	Cell Signaling Technology	Cat#5483s	WB
FLAG M2	Sigma-Aldrich	Cat#F1804	Chip
HRP labeled goat anti-Rabbit IgG(H+L)	Abcam	Cat# 205718	WB
HRP labeled goat anti-Mouse IgG(H+L)	Abcam	Cat# 205719	WB
Goat anti-Mouse IgG (H+L) Cross-Adsorbed Secondary antibody, Alexa Fluor 488	Thermo Fisher Scientific	Cat# A-11001	IF

Goat anti-Mouse IgG (H+L) Cross-Adsorbed Secondary antibody, Alexa Fluor 546	**Thermo Fisher Scientific**	**Cat# A-11003**	**IF**
Goat anti-Rabbit IgG (H+L) Cross-Adsorbed Secondary antibody, Alexa Fluor 488	**Thermo Fisher Scientific**	**Cat# A-11008**	**IF**
Goat anti-Rabbit IgG (H+L) Cross-Adsorbed Secondary antibody, Alexa Fluor 546	**Thermo Fisher Scientific**	**Cat# A-11010**	**IF**

1C

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.204	5	.200*	0.913	5	0.488
	2.00	0.216	5	.200*	0.942	5	0.683

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.237	5	.200*	0.898	5	0.400
	2.00	0.240	5	.200*	0.944	5	0.694

1E

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.200	5	.200*	0.966	5	0.849
	2.00	0.300	5	0.162	0.852	5	0.200

1G

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.200	8	.200*	0.939	8	0.604
	2.00	0.209	8	.200*	0.902	8	0.299

1H

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.292	5	0.188	0.889	5	0.351
	2.00	0.153	5	.200*	0.972	5	0.890

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.203	5	.200*	0.942	5	0.682

	2.00	0.155	5	.200*	0.987	5	0.968

1I

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.231	5	.200*	0.870	5	0.268
	2.00	0.211	5	.200*	0.934	5	0.623

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.247	5	.200*	0.906	5	0.445
	2.00	0.155	5	.200*	0.982	5	0.943

2A

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.202	5	.200*	0.975	5	0.908
	2.00	0.209	5	.200*	0.923	5	0.552

2B

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.187	5	.200*	0.961	5	0.813
	2.00	0.216	5	.200*	0.966	5	0.851

2C

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.194	5	.200*	0.947	5	0.715
	2.00	0.261	5	.200*	0.908	5	0.458

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.235	5	.200*	0.915	5	0.500
	2.00	0.263	5	.200*	0.904	5	0.433

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.303	5	0.151	0.902	5	0.419
	2.00	0.253	5	.200*	0.925	5	0.562

2D

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.224	8	.200*	0.860	8	0.120
	2.00	0.211	8	.200*	0.912	8	0.368
	3.00	0.197	8	.200*	0.902	8	0.302
	4.00	0.193	8	.200*	0.889	8	0.231

2E

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.275	3		0.943	3	0.542
	2.00	0.223	3		0.985	3	0.766
	3.00	0.327	3		0.871	3	0.298
	4.00	0.311	3		0.897	3	0.375

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.176	3		1.000	3	0.976
	2.00	0.369	3		0.789	3	0.089
	3.00	0.247	3		0.969	3	0.661
	4.00	0.354	3		0.820	3	0.164

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.326	3		0.874	3	0.306
	2.00	0.301	3		0.912	3	0.425
	3.00	0.196	3		0.996	3	0.879
	4.00	0.290	3		0.926	3	0.474

2G

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.156	8	.200*	0.985	8	0.983
	2.00	0.160	8	.200*	0.973	8	0.919
	3.00	0.166	8	.200*	0.946	8	0.667
	4.00	0.236	8	.200*	0.922	8	0.446

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.143	8	.200*	0.957	8	0.778
	2.00	0.229	8	.200*	0.830	8	0.059
	3.00	0.302	8	0.031	0.850	8	0.095
	4.00	0.237	8	.200*	0.885	8	0.212

2H

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.144	8	.200*	0.955	8	0.759
	2.00	0.161	8	.200*	0.971	8	0.906
	3.00	0.166	8	.200*	0.907	8	0.330
	4.00	0.136	8	.200*	0.980	8	0.965

2I

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.191	8	.200*	0.928	8	0.494
	2.00	0.212	8	.200*	0.954	8	0.752
	3.00	0.186	8	.200*	0.931	8	0.521
	4.00	0.177	8	.200*	0.930	8	0.514

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.130	8	.200*	0.964	8	0.851
	2.00	0.149	8	.200*	0.977	8	0.945
	3.00	0.189	8	.200*	0.948	8	0.688
	4.00	0.151	8	.200*	0.974	8	0.924

2K

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.208	3		0.992	3	0.827
	2.00	0.176	3		1.000	3	0.981
	3.00	0.274	3		0.945	3	0.547
	4.00	0.320	3		0.884	3	0.335

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.275	3		0.943	3	0.540
	2.00	0.331	3		0.866	3	0.284
	3.00	0.340	3		0.849	3	0.237
	4.00	0.186	3		0.998	3	0.921

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.327	3		0.872	3	0.301
	2.00	0.223	3		0.985	3	0.764
	3.00	0.261	3		0.957	3	0.603
	4.00	0.261	3		0.957	3	0.603

4B

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.163	8	.200*	0.947	8	0.679
	2.00	0.212	5	.200*	0.974	5	0.898
	3.00	0.310	5	0.130	0.893	5	0.374
	4.00	0.161	8	.200*	0.941	8	0.623
	5.00	0.209	5	.200*	0.944	5	0.692
	6.00	0.192	5	.200*	0.970	5	0.874

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.131	8	.200*	0.974	8	0.931
	2.00	0.215	5	.200*	0.962	5	0.824
	3.00	0.189	5	.200*	0.975	5	0.909
	4.00	0.178	8	.200*	0.956	8	0.770

	5.00	0.318	5	0.108	0.903	5	0.425
	6.00	0.197	5	.200*	0.976	5	0.913

4C

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.164	8	.200*	0.986	8	0.986
	2.00	0.176	5	.200*	0.982	5	0.947
	3.00	0.202	5	.200*	0.937	5	0.648
	4.00	0.164	8	.200*	0.952	8	0.732
	5.00	0.269	5	.200*	0.900	5	0.412
	6.00	0.232	5	.200*	0.922	5	0.545

4D

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.256	8	0.131	0.861	8	0.123
	2.00	0.245	5	.200*	0.882	5	0.320
	3.00	0.266	5	.200*	0.845	5	0.179
	4.00	0.165	8	.200*	0.971	8	0.903
	5.00	0.188	5	.200*	0.962	5	0.822
	6.00	0.235	5	.200*	0.931	5	0.604

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.158	8	.200*	0.946	8	0.674
	2.00	0.220	5	.200*	0.926	5	0.567
	3.00	0.227	5	.200*	0.874	5	0.283
	4.00	0.168	8	.200*	0.929	8	0.508
	5.00	0.187	5	.200*	0.941	5	0.671
	6.00	0.274	5	.200*	0.882	5	0.316

4F

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.367	3		0.794	3	0.100
	2.00	0.189	3		0.998	3	0.908

	3.00	0.289	3		0.927	3	0.477
	4.00	0.359	3		0.810	3	0.138
	5.00	0.368	3		0.792	3	0.095
	6.00	0.365	3		0.796	3	0.106

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.237	3		0.976	3	0.706
	2.00	0.225	3		0.984	3	0.759
	3.00	0.341	3		0.847	3	0.234
	4.00	0.176	3		1.000	3	0.977
	5.00	0.356	3		0.817	3	0.155
	6.00	0.302	3		0.910	3	0.418

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.367	3		0.794	3	0.099
	2.00	0.339	3		0.850	3	0.241
	3.00	0.352	3		0.826	3	0.178
	4.00	0.317	3		0.888	3	0.347
	5.00	0.221	3		0.986	3	0.773
	6.00	0.347	3		0.836	3	0.203

4H

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.224	8	.200*	0.911	8	0.361
	2.00	0.161	5	.200*	0.980	5	0.934
	3.00	0.208	8	.200*	0.954	8	0.753
	4.00	0.197	5	.200*	0.947	5	0.716

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.201	8	.200*	0.933	8	0.548
	2.00	0.158	5	.200*	0.966	5	0.850
	3.00	0.222	8	.200*	0.884	8	0.204
	4.00	0.172	5	.200*	0.973	5	0.896

4I

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.173	8	.200*	0.964	8	0.845
	2.00	0.182	5	.200*	0.922	5	0.542
	3.00	0.198	8	.200*	0.945	8	0.659
	4.00	0.223	5	.200*	0.958	5	0.793

4J

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.206	8	.200*	0.864	8	0.130
	2.00	0.225	5	.200*	0.916	5	0.504
	3.00	0.177	8	.200*	0.972	8	0.910
	4.00	0.222	5	.200*	0.866	5	0.250

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.210	8	.200*	0.945	8	0.656
	2.00	0.244	5	.200*	0.890	5	0.357
	3.00	0.232	8	.200*	0.857	8	0.111
	4.00	0.271	5	.200*	0.902	5	0.419

4L

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.350	3		0.829	3	0.185
	2.00	0.328	3		0.871	3	0.298
	3.00	0.188	3		0.998	3	0.912
	4.00	0.263	3		0.956	3	0.594

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.362	3		0.805	3	0.127
	2.00	0.245	3		0.970	3	0.670
	3.00	0.287	3		0.930	3	0.487
	4.00	0.228	3		0.982	3	0.745

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.314	3		0.892	3	0.362
	2.00	0.221	3		0.986	3	0.773
	3.00	0.181	3		0.999	3	0.942
	4.00	0.176	3		1.000	3	0.981

5C

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.255	3		0.963	3	0.628
	2.00	0.252	3		0.965	3	0.641

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.201	3		0.995	3	0.859
	2.00	0.339	3		0.850	3	0.240

5D

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.225	3		0.984	3	0.755
	2.00	0.186	3		0.998	3	0.921
	3.00	0.371	3		0.785	3	0.078
	4.00	0.183	3		0.999	3	0.931

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.355	3		0.820	3	0.163
	2.00	0.254	3		0.964	3	0.635
	3.00	0.321	3		0.881	3	0.328
	4.00	0.375	3		0.775	3	0.057

5E

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.266	3		0.952	3	0.578
	2.00	0.337	3		0.854	3	0.252
	3.00	0.234	3		0.979	3	0.719
	4.00	0.330	3		0.866	3	0.285

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.324	3		0.876	3	0.313
	2.00	0.182	3		0.999	3	0.937
	3.00	0.267	3		0.952	3	0.577
	4.00	0.243	3		0.972	3	0.679

5F

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.178	3		0.999	3	0.955
	2.00	0.236	3		0.977	3	0.711
	3.00	0.219	3		0.987	3	0.781
	4.00	0.203	3		0.994	3	0.849

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.204	3		0.994	3	0.847
	2.00	0.304	3		0.907	3	0.409
	3.00	0.302	3		0.910	3	0.417
	4.00	0.330	3		0.866	3	0.284

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.274	3		0.944	3	0.543
	2.00	0.257	3		0.960	3	0.618
	3.00	0.209	3		0.992	3	0.824
	4.00	0.182	3		0.999	3	0.937

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.366	3		0.795	3	0.104
	2.00	0.187	3		0.998	3	0.914
	3.00	0.178	3		1.000	3	0.958
	4.00	0.290	3		0.926	3	0.473

6B

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.235	3		0.978	3	0.714
	2.00	0.355	3		0.818	3	0.159

6C

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.160	5	.200*	0.984	5	0.953
	2.00	0.170	5	.200*	0.975	5	0.908

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.230	5	.200*	0.915	5	0.500
	2.00	0.233	5	.200*	0.944	5	0.696

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.233	5	.200*	0.867	5	0.256
	2.00	0.199	5	.200*	0.943	5	0.690

6D

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.272	5	.200*	0.841	5	0.168
	2.00	0.220	5	.200*	0.932	5	0.607
	3.00	0.225	5	.200*	0.944	5	0.695
	4.00	0.283	5	.200*	0.784	5	0.060

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.212	5	.200*	0.889	5	0.354
	2.00	0.221	5	.200*	0.927	5	0.577
	3.00	0.263	5	.200*	0.901	5	0.416
	4.00	0.398	5	0.010	0.718	4	0.254

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.217	5	.200*	0.945	5	0.703
	2.00	0.218	5	.200*	0.918	5	0.516
	3.00	0.257	5	.200*	0.905	5	0.440
	4.00	0.324	5	0.094	0.849	5	0.191

6F

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.191	8	.200*	0.904	8	0.315
	2.00	0.253	5	.200*	0.920	5	0.532
	3.00	0.354	8	0.004	0.789	6	0.081
	4.00	0.230	5	.200*	0.850	5	0.195

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.221	8	.200*	0.927	8	0.493
	2.00	0.212	5	.200*	0.912	5	0.481
	3.00	0.276	8	0.073	0.836	8	0.068
	4.00	0.233	5	.200*	0.902	5	0.423

6G

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.166	8	.200*	0.964	8	0.846
	2.00	0.266	5	.200*	0.888	5	0.348
	3.00	0.167	8	.200*	0.932	8	0.532
	4.00	0.178	5	.200*	0.982	5	0.944

6H

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.165	8	.200*	0.948	8	0.694
	2.00	0.174	5	.200*	0.950	5	0.740
	3.00	0.125	8	.200*	0.966	8	0.869
	4.00	0.224	5	.200*	0.912	5	0.477

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.143	8	.200*	0.976	8	0.939
	2.00	0.194	5	.200*	0.954	5	0.763
	3.00	0.217	8	.200*	0.842	8	0.079
	4.00	0.198	5	.200*	0.930	5	0.596

6J

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.274	3		0.944	3	0.544
	2.00	0.319	3		0.885	3	0.338
	3.00	0.344	3		0.841	3	0.217
	4.00	0.242	3		0.973	3	0.685

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.369	3		0.789	3	0.089
	2.00	0.226	3		0.984	3	0.754
	3.00	0.216	3		0.988	3	0.795
	4.00	0.204	3		0.993	3	0.844

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.328	3		0.870	3	0.296
	2.00	0.367	3		0.792	3	0.096
	3.00	0.256	3		0.961	3	0.622
	4.00	0.334	3		0.860	3	0.269

6K

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.149	8	.200*	0.951	8	0.721
	2.00	0.185	8	.200*	0.913	8	0.376
	3.00	0.184	8	.200*	0.952	8	0.732
	4.00	0.236	8	.200*	0.923	8	0.455

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.229	8	.200*	0.830	8	0.059
	2.00	0.143	8	.200*	0.957	8	0.778
	3.00	0.298	8	0.035	0.888	8	0.224
	4.00	0.198	8	.200*	0.917	8	0.409

6L

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.144	8	.200*	0.955	8	0.759
	2.00	0.161	8	.200*	0.971	8	0.906
	3.00	0.166	8	.200*	0.907	8	0.330
	4.00	0.191	8	.200*	0.924	8	0.461

6M

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.241	8	0.192	0.905	8	0.319
	2.00	0.268	8	0.094	0.809	8	0.036
	3.00	0.206	8	.200*	0.868	8	0.145
	4.00	0.172	8	.200*	0.937	8	0.585

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.218	8	.200*	0.877	8	0.177
	2.00	0.229	8	.200*	0.913	8	0.377
	3.00	0.198	8	.200*	0.886	8	0.215
	4.00	0.193	8	.200*	0.926	8	0.482

6N

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.232	3		0.980	3	0.727
	2.00	0.266	3		0.952	3	0.580
	3.00	0.369	3		0.789	3	0.089
	4.00	0.206	3		0.993	3	0.837

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.352	3		0.825	3	0.174
	2.00	0.363	3		0.803	3	0.122
	3.00	0.319	3		0.885	3	0.339
	4.00	0.215	3		0.989	3	0.799

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.198	3		0.995	3	0.869
	2.00	0.286	3		0.931	3	0.492
	3.00	0.344	3		0.841	3	0.217
	4.00	0.261	3		0.957	3	0.603

7A

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.314	3		0.893	3	0.364
	2.00	0.256	3		0.962	3	0.625
	3.00	0.258	3		0.960	3	0.617
	4.00	0.205	3		0.993	3	0.839

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.234	5	.200*	0.934	5	0.624
	2.00	0.179	5	.200*	0.982	5	0.947
	3.00	0.251	5	.200*	0.894	5	0.376

	4.00	0.314	5	0.119	0.858	5	0.222

7B

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.233	3		0.979	3	0.721
	2.00	0.250	3		0.967	3	0.650
	3.00	0.297	3		0.917	3	0.442
	4.00	0.339	3		0.851	3	0.242

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.303	5	0.150	0.777	5	0.052
	2.00	0.303	5	0.150	0.830	5	0.138
	3.00	0.233	5	.200*	0.850	5	0.194
	4.00	0.343	5	0.055	0.740	5	0.024

7C

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.233	3		0.979	3	0.721
	2.00	0.243	3		0.972	3	0.682
	3.00	0.297	3		0.917	3	0.442
	4.00	0.335	3		0.858	3	0.263

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.303	5	0.150	0.777	5	0.052
	2.00	0.221	5	.200*	0.918	5	0.516
	3.00	0.233	5	.200*	0.850	5	0.194
	4.00	0.280	5	.200*	0.887	5	0.344

7E

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.323	3		0.879	3	0.322
	2.00	0.297	3		0.917	3	0.442

	3.00	0.177	3		1.000	3	0.966

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.350	3		0.829	3	0.185
	2.00	0.280	3		0.938	3	0.520
	3.00	0.251	3		0.966	3	0.644

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.317	3		0.888	3	0.347
	2.00	0.302	3		0.910	3	0.419
	3.00	0.177	3		1.000	3	0.972

7F

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.292	3		0.924	3	0.466
	2.00	0.230	3		0.981	3	0.736
	3.00	0.285	3		0.932	3	0.495

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.355	3		0.820	3	0.163
	2.00	0.271	3		0.948	3	0.561
	3.00	0.330	3		0.866	3	0.285

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.181	3		0.999	3	0.941
	2.00	0.194	3		0.997	3	0.888
	3.00	0.359	3		0.810	3	0.139

7G

Test of Normality

	Kolmogorov-Smirnov test	Shapiro-Wilks test		

						df	SIG
VAR00002	1.00	0.245	3		0.971	3	0.672
	2.00	0.357	3		0.814	3	0.149
	3.00	0.300	3		0.912	3	0.426

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.365	3		0.798	3	0.109
	2.00	0.361	3		0.807	3	0.131
	3.00	0.182	3		0.999	3	0.938

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.216	3		0.989	3	0.796
	2.00	0.180	3		0.999	3	0.943
	3.00	0.274	3		0.944	3	0.544

7H

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.178	3		0.999	3	0.954
	2.00	0.375	3		0.773	3	0.052
	3.00	0.338	3		0.852	3	0.247

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.364	3		0.801	3	0.116
	2.00	0.276	3		0.943	3	0.538
	3.00	0.331	3		0.865	3	0.282

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.228	3		0.982	3	0.744
	2.00	0.257	3		0.960	3	0.618
	3.00	0.294	3		0.921	3	0.456

8A

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.175	3		1.000	3	0.990
	2.00	0.299	3		0.914	3	0.432
	3.00	0.282	3		0.935	3	0.509
	4.00	0.353	3		0.824	3	0.172

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.191	5	.200*	0.967	5	0.859
	2.00	0.228	5	.200*	0.908	5	0.453
	3.00	0.185	5	.200*	0.963	5	0.830
	4.00	0.263	5	.200*	0.920	5	0.531

8C

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.210	8	.200*	0.909	8	0.346
	2.00	0.163	8	.200*	0.974	8	0.924
	3.00	0.174	7	.200*	0.891	7	0.278
	4.00	0.193	8	.200*	0.937	8	0.581

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.151	8	.200*	0.943	8	0.642
	2.00	0.153	8	.200*	0.951	8	0.725
	3.00	0.281	7	0.099	0.850	7	0.122
	4.00	0.162	8	.200*	0.976	8	0.940

8E

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.196	8	.200*	0.918	8	0.415
	2.00	0.194	8	.200*	0.965	8	0.854
	3.00	0.153	8	.200*	0.961	8	0.820
	4.00	0.184	8	.200*	0.941	8	0.623

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.252	8	0.145	0.925	8	0.473
	2.00	0.158	8	.200*	0.962	8	0.832
	3.00	0.227	8	.200*	0.866	8	0.139
	4.00	0.180	8	.200*	0.961	8	0.819

8D

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.158	8	.200*	0.952	8	0.730
	2.00	0.190	8	.200*	0.927	8	0.489
	3.00	0.210	8	.200*	0.939	8	0.601
	4.00	0.156	8	.200*	0.974	8	0.927

8G

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.251	3		0.966	3	0.644
	2.00	0.316	3		0.889	3	0.352
	3.00	0.183	3		0.999	3	0.932
	4.00	0.208	3		0.992	3	0.826

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.203	3		0.994	3	0.849
	2.00	0.192	3		0.997	3	0.896
	3.00	0.257	3		0.961	3	0.619
	4.00	0.178	3		0.999	3	0.952

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.364	3		0.800	3	0.114
	2.00	0.276	3		0.942	3	0.537
	3.00	0.356	3		0.818	3	0.157
	4.00	0.328	3		0.871	3	0.298

8I

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.218	8	.200*	0.857	8	0.112
	2.00	0.165	8	.200*	0.944	8	0.649
	3.00	0.225	8	.200*	0.893	8	0.251
	4.00	0.195	8	.200*	0.932	8	0.535

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.138	8	.200*	0.986	8	0.986
	2.00	0.232	8	.200*	0.868	8	0.145
	3.00	0.171	8	.200*	0.940	8	0.613
	4.00	0.302	8	0.031	0.835	8	0.067

8J

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.125	8	.200*	0.957	8	0.777
	2.00	0.142	8	.200*	0.954	8	0.750
	3.00	0.201	8	.200*	0.839	8	0.074
	4.00	0.153	8	.200*	0.945	8	0.660

8K

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.196	8	.200*	0.921	8	0.440
	2.00	0.252	8	0.143	0.905	8	0.319
	3.00	0.239	8	0.199	0.862	8	0.125
	4.00	0.139	8	.200*	0.962	8	0.831

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.194	8	.200*	0.918	8	0.418
	2.00	0.246	8	0.168	0.889	8	0.230

	3.00	0.182	8	.200*	0.901	8	0.298
	4.00	0.178	8	.200*	0.934	8	0.554

8M

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.268	3		0.950	3	0.570
	2.00	0.342	3		0.846	3	0.229
	3.00	0.369	3		0.789	3	0.089
	4.00	0.178	3		0.999	3	0.953

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.200	3		0.995	3	0.860
	2.00	0.187	3		0.998	3	0.915
	3.00	0.295	3		0.920	3	0.453
	4.00	0.237	3		0.977	3	0.708

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.361	3		0.807	3	0.131
	2.00	0.267	3		0.951	3	0.575
	3.00	0.193	3		0.997	3	0.892
	4.00	0.247	3		0.969	3	0.662

S1C

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		
						df	SIG
VAR00002	1.00	0.180	3		0.999	3	0.943
	2.00	0.321	3		0.881	3	0.328
	3.00	0.346	3		0.837	3	0.207
	4.00	0.347	3		0.834	3	0.200
	5.00	0.200	3		0.995	3	0.863
	6.00	0.368	3		0.791	3	0.092

Test of Normality

	Kolmogorov-Smirnov test			Shapiro-Wilks test		

						df	SIG
VAR00002	1.00	0.260	3		0.958	3	0.608
	2.00	0.180	3		0.999	3	0.947
	3.00	0.236	3		0.977	3	0.711
	4.00	0.365	3		0.796	3	0.106
	5.00	0.224	3		0.984	3	0.759
	6.00	0.274	3		0.945	3	0.546

S1D

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.226	5	.200*	0.926	5	0.570
	2.00	0.222	5	.200*	0.970	5	0.873
	3.00	0.155	5	.200*	0.994	5	0.991
	4.00	0.238	5	.200*	0.907	5	0.448

S1E

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.216	5	.200*	0.916	5	0.502
	2.00	0.190	5	.200*	0.961	5	0.812
	3.00	0.148	5	.200*	0.984	5	0.956
	4.00	0.181	5	.200*	0.935	5	0.629

S1G

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.274	5	.200*	0.860	5	0.228
	2.00	0.185	5	.200*	0.945	5	0.700
	3.00	0.297	4		0.768	4	0.056
	4.00	0.206	5	.200*	0.917	5	0.511

S1F

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.173	5	.200*	0.952	5	0.755
	2.00	0.187	5	.200*	0.937	5	0.645
	3.00	0.229	5	.200*	0.960	5	0.805
	4.00	0.320	5	0.105	0.840	5	0.166

S1H

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.177	3		1.000	3	0.965
	2.00	0.177	3		1.000	3	0.962
	3.00	0.178	3		0.999	3	0.955
	4.00	0.177	3		1.000	3	0.962

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.337	3		0.854	3	0.250
	2.00	0.249	3		0.967	3	0.653
	3.00	0.291	3		0.925	3	0.471
	4.00	0.211	3		0.991	3	0.817

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.335	3		0.858	3	0.263
	2.00	0.279	3		0.939	3	0.522
	3.00	0.345	3		0.840	3	0.214
	4.00	0.353	3		0.822	3	0.169

S2B

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.206	3		0.993	3	0.838
	2.00	0.177	3		1.000	3	0.966
	3.00	0.186	3		0.998	3	0.921
	4.00	0.261	3		0.957	3	0.603

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.199	3		0.995	3	0.866
	2.00	0.292	3		0.923	3	0.464
	3.00	0.243	3		0.972	3	0.679
	4.00	0.233	3		0.979	3	0.724

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.352	3		0.826	3	0.178
	2.00	0.207	3		0.992	3	0.833
	3.00	0.255	3		0.962	3	0.627
	4.00	0.262	3		0.956	3	0.597

S2C

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.182	8	.200*	0.945	8	0.657
	2.00	0.188	8	.200*	0.943	8	0.637

S3B

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.361	3		0.807	3	0.131
	2.00	0.194	3		0.997	3	0.888

S3C

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.350	3		0.830	3	0.189
	2.00	0.226	3		0.983	3	0.751

S3D

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.234	3		0.978	3	0.718
	2.00	0.345	3		0.839	3	0.211
	3.00	0.191	3		0.997	3	0.900
	4.00	0.359	3		0.810	3	0.138

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		

						df	SIG
VAR00002	1.00	0.313	3		0.894	3	0.366
	2.00	0.358	3		0.813	3	0.146
	3.00	0.278	3		0.940	3	0.529
	4.00	0.233	3		0.979	3	0.721

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.296	3		0.918	3	0.446
	2.00	0.222	3		0.985	3	0.769
	3.00	0.273	3		0.946	3	0.551
	4.00	0.211	3		0.991	3	0.814

S3F

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.331	3		0.865	3	0.280
	2.00	0.323	3		0.878	3	0.319
	3.00	0.181	3		0.999	3	0.941
	4.00	0.182	3		0.999	3	0.937

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.201	3		0.994	3	0.857
	2.00	0.311	3		0.897	3	0.375
	3.00	0.194	3		0.996	3	0.886
	4.00	0.226	3		0.983	3	0.751

S3G

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.200	3		0.995	3	0.863
	2.00	0.189	3		0.998	3	0.908
	3.00	0.225	3		0.984	3	0.758
	4.00	0.302	3		0.910	3	0.418
	5.00	0.297	3		0.917	3	0.441
	6.00	0.200	3		0.995	3	0.862

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.345	3		0.839	3	0.211
	2.00	0.286	3		0.930	3	0.490
	3.00	0.312	3		0.895	3	0.371
	4.00	0.365	3		0.797	3	0.108
	5.00	0.344	3		0.841	3	0.217
	6.00	0.357	3		0.815	3	0.151

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.369	3		0.787	3	0.085
	2.00	0.219	3		0.987	3	0.783
	3.00	0.320	3		0.884	3	0.335
	4.00	0.359	3		0.810	3	0.138
	5.00	0.325	3		0.874	3	0.308
	6.00	0.365	3		0.797	3	0.108

S3H

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.140	8	.200*	0.988	8	0.992
	2.00	0.158	8	.200*	0.967	8	0.871
	3.00	0.139	8	.200*	0.939	8	0.605
	4.00	0.186	8	.200*	0.937	8	0.583

S4B

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.363	3		0.801	3	0.118
	2.00	0.348	3		0.834	3	0.199

Test of Normality

	Kolmogorov-Smirnov test	Shapiro-Wilks test	

						df	SIG
VAR00002	1.00	0.260	3		0.958	3	0.605
	2.00	0.342	3		0.846	3	0.229

S4C

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.296	3		0.918	3	0.444
	2.00	0.319	3		0.885	3	0.339

S4D

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.330	3		0.867	3	0.287
	2.00	0.254	3		0.963	3	0.632

S4E

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.289	3		0.927	3	0.479
	2.00	0.192	3		0.997	3	0.897
	3.00	0.336	3		0.855	3	0.255
	4.00	0.353	3		0.823	3	0.171

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.208	3		0.992	3	0.828
	2.00	0.302	3		0.910	3	0.419
	3.00	0.237	3		0.976	3	0.704
	4.00	0.205	3		0.993	3	0.839

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.229	3		0.981	3	0.738
	2.00	0.266	3		0.952	3	0.579
	3.00	0.197	3		0.996	3	0.874
	4.00	0.370	3		0.786	3	0.082

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.187	3		0.998	3	0.916
	2.00	0.188	3		0.998	3	0.911
	3.00	0.308	3		0.902	3	0.392
	4.00	0.197	3		0.996	3	0.874

S4G

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.358	3		0.812	3	0.144
	2.00	0.290	3		0.926	3	0.476
	3.00	0.299	3		0.914	3	0.432
	4.00	0.233	3		0.979	3	0.724

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.353	3		0.823	3	0.170
	2.00	0.318	3		0.886	3	0.342
	3.00	0.312	3		0.896	3	0.374
	4.00		3		0.912	3	0.425

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.269	3		0.950	3	0.568
	2.00	0.297	3		0.917	3	0.442
	3.00	0.276	3		0.942	3	0.536
	4.00	0.271	3		0.947	3	0.558

S4I

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.314	3		0.893	3	0.365
	2.00	0.198	3		0.995	3	0.869
	3.00	0.350	3		0.830	3	0.188
	4.00	0.366	3		0.796	3	0.105

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.224	3		0.984	3	0.760
	2.00	0.237	3		0.977	3	0.707
	3.00	0.365	3		0.797	3	0.108
	4.00	0.312	3		0.895	3	0.371

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.359	3		0.810	3	0.139
	2.00	0.223	3		0.985	3	0.764
	3.00	0.178	3		0.999	3	0.954
	4.00	0.211	3		0.991	3	0.817

S4G

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.189	8	.200*	0.908	8	0.340
	2.00	0.154	8	.200*	0.943	8	0.641
	3.00	0.212	7	.200*	0.923	7	0.494
	4.00	0.184	9	.200*	0.921	9	0.398

S5A

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.203	5	.200*	0.929	5	0.590
	2.00	0.250	5	.200*	0.935	5	0.631
	3.00	0.278	5	.200*	0.857	5	0.216
	4.00	0.212	5	.200*	0.911	5	0.476
	5.00	0.288	5	.200*	0.885	5	0.331
	6.00	0.317	5	0.112	0.823	5	0.124

S5C

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG

VAR00002	1.00	0.231	5	.200*	0.960	5	0.807
	2.00	0.222	5	.200*	0.899	5	0.404
	3.00	0.283	5	.200*	0.865	5	0.247
	4.00	0.207	5	.200*	0.967	5	0.858

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.264	5	.200*	0.857	5	0.218
	2.00	0.207	5	.200*	0.940	5	0.669
	3.00	0.205	5	.200*	0.939	5	0.661
	4.00	0.204	5	.200*	0.946	5	0.705

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.210	5	.200*	0.927	5	0.579
	2.00	0.252	4		0.894	4	0.403
	3.00	0.213	5	.200*	0.926	5	0.569
	4.00	0.289	5	.200*	0.784	5	0.059

S5D

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.123	9	.200*	0.960	9	0.793
	2.00	0.167	9	.200*	0.946	9	0.650
	3.00	0.250	8	0.151	0.862	8	0.125
	4.00	0.110	10	.200*	0.972	10	0.910

S5E

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.228	3		0.982	3	0.745
	2.00	0.370	3		0.785	3	0.079
	3.00	0.204	3		0.993	3	0.844
	4.00	0.328	3		0.870	3	0.294

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test		

						df	SIG
VAR00002	1.00	0.195	3		0.996	3	0.881
	2.00	0.343	3		0.844	3	0.224
	3.00	0.362	3		0.805	3	0.126
	4.00	0.205	3		0.993	3	0.839

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.346	3		0.837	3	0.205
	2.00	0.327	3		0.871	3	0.298
	3.00	0.312	3		0.895	3	0.371
	4.00	0.346	3		0.837	3	0.205

S5F

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.260	3		0.958	3	0.608
	2.00	0.269	3		0.950	3	0.568
	3.00	0.274	3		0.945	3	0.547
	4.00	0.296	3		0.919	3	0.448

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.372	3		0.780	3	0.068
	2.00	0.322	3		0.880	3	0.324
	3.00	0.341	3		0.847	3	0.233
	4.00	0.221	3		0.986	3	0.775

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.278	3		0.940	3	0.529
	2.00	0.280	3		0.937	3	0.517
	3.00	0.304	3		0.907	3	0.408
	4.00	0.278	3		0.940	3	0.526

S5G

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.202	8	.200*	0.926	8	0.483
	2.00	0.240	7	.200*	0.846	7	0.112
	3.00	0.217	8	.200*	0.887	8	0.218
	4.00	0.157	8	.200*	0.977	8	0.944

S6A

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.320	3		0.883	3	0.334
	2.00	0.198	3		0.995	3	0.869
	3.00	0.308	3		0.902	3	0.391
	4.00	0.343	3		0.843	3	0.223

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.245	5	.200*	0.944	5	0.692
	2.00	0.204	5	.200*	0.939	5	0.659
	3.00	0.183	5	.200*	0.905	5	0.436
	4.00	0.257	5	.200*	0.857	5	0.218

S6B

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.363	3		0.802	3	0.118
	2.00	0.286	3		0.931	3	0.492
	3.00	0.338	3		0.852	3	0.247
	4.00	0.362	3		0.805	3	0.126
	5.00	0.358	3		0.814	3	0.147
	6.00	0.260	3		0.958	3	0.608

Test of Normality

分组		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.246	5	.200*	0.918	5	0.516
	2.00	0.207	5	.200*	0.939	5	0.658
	3.00	0.251	5	.200*	0.927	5	0.578
	4.00	0.338	5	0.064	0.776	5	0.051

	5.00	0.277	5	.200*	0.884	5	0.329
	6.00	0.202	5	.200*	0.932	5	0.610

S6C

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.229	3		0.982	3	0.740
	2.00	0.312	3		0.896	3	0.373
	3.00	0.192	3		0.997	3	0.895
	4.00	0.258	3		0.960	3	0.617

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.243	5	.200*	0.929	5	0.589
	2.00	0.206	5	.200*	0.939	5	0.661
	3.00	0.198	5	.200*	0.953	5	0.762
	4.00	0.255	5	.200*	0.909	5	0.460

S7A

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.184	3		0.999	3	0.927
	2.00	0.374	3		0.777	3	0.060

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.364	3		0.800	3	0.115
	2.00	0.347	3		0.835	3	0.202

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.229	3		0.982	3	0.740
	2.00	0.342	3		0.844	3	0.225

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.317	3		0.888	3	0.349
	2.00	0.185	3		0.998	3	0.925

Test of Normality

		Kolmogorov-Smirnov test			Shapiro-Wilks test	df	SIG
VAR00002	1.00	0.298	3		0.916	3	0.438
	2.00	0.232	3		0.980	3	0.727