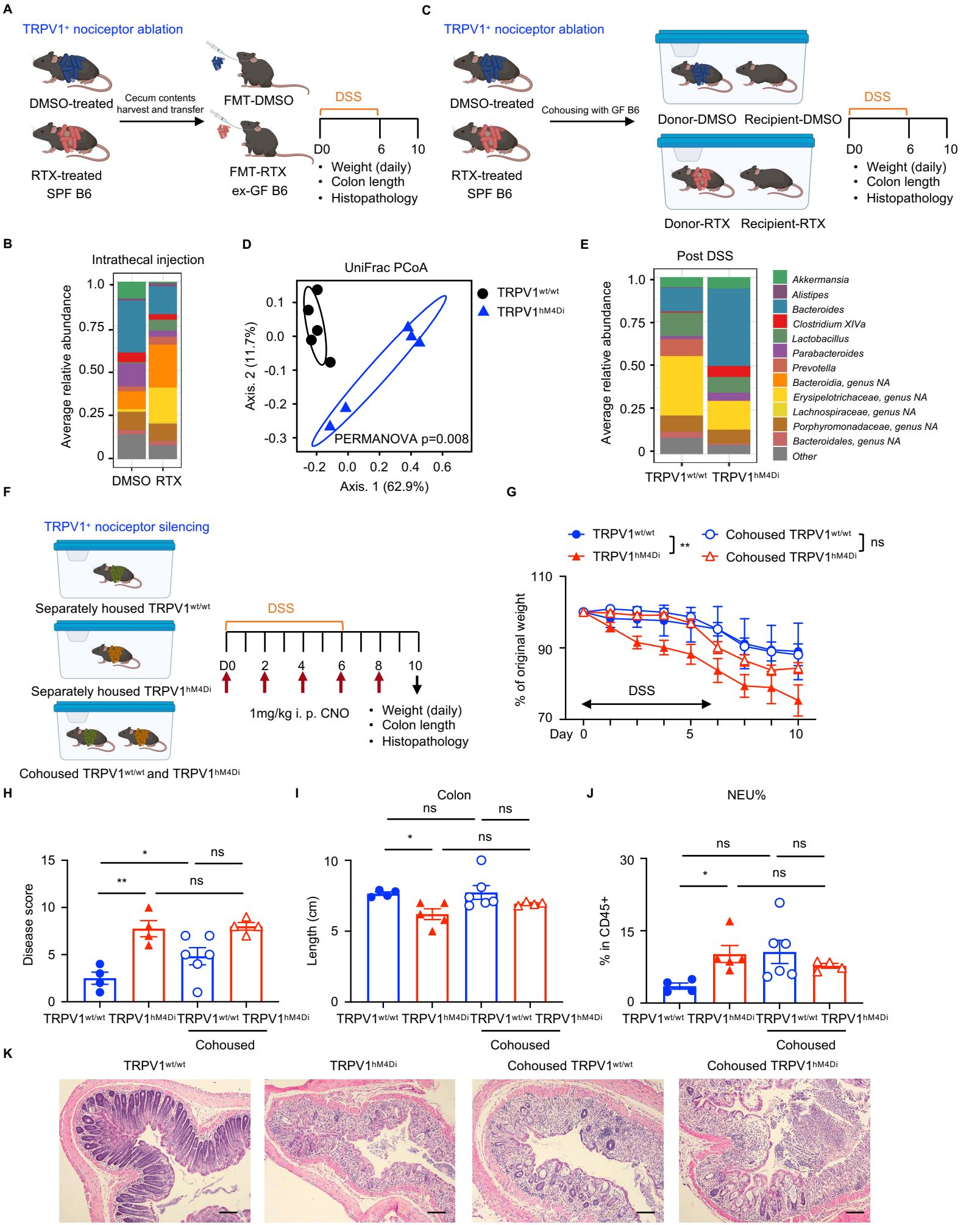
Figure S3


A
TRPV1+ nociceptor ablation
DMSO-treated
RTX-treated
SPF B6
Cecum contents harvest and transfer
FMT-DMSO
FMT-RTX
ex-GF B6
DSS
D0
6
10
• Weight (daily)
• Colon length
• Histopathology
C
TRPV1+ nociceptor ablation
DMSO-treated
RTX-treated
SPF B6
Cohousing with GF B6
Donor-DMSO
Recipient-DMSO
Donor-RTX
Recipient-RTX
DSS
D0
6
10
• Weight (daily)
• Colon length
• Histopathology
B
Intrathecal injection
Average relative abundance
1.0
0.75
0.50
0.25
0
DMSO
RTX
D
UniFrac PCoA
TRPV1wt/wt
TRPV1hM4Di
Axis. 2 (11.7%)
Axis. 1 (62.9%)
PERMANOVA p=0.008
E
Post DSS
Average relative abundance
TRPV1wt/wt
TRPV1hM4Di
Akkermansia
Alistipes
Bacteroides
Clostridium XIVa
Lactobacillus
Parabacteroides
Prevotella
Bacteroidia, genus NA
Erysipelotrichaceae, genus NA
Lachnospiraceae, genus NA
Porphyromonadaceae, genus NA
Bacteroidales, genus NA
Other
F
TRPV1+ nociceptor silencing
Separately housed TRPV1wt/wt
Separately housed TRPV1hM4Di
Cohoused TRPV1wt/wt and TRPV1hM4Di
DSS
D0
2
4
6
8
10
1mg/kg i. p. CNO
• Weight (daily)
• Colon length
• Histopathology
G
TRPV1wt/wt
TRPV1hM4Di
Cohoused TRPV1wt/wt
Cohoused TRPV1hM4Di
**
ns
% of original weight
110
90
70
DSS
Day 0
5
10
H
Disease score
15
10
5
0
*
ns
**
ns
TRPV1wt/wt
TRPV1hM4Di
TRPV1wt/wt
TRPV1hM4Di
Cohoused
I
Colon
ns
ns
*
ns
Length (cm)
10
5
0
TRPV1wt/wt
TRPV1hM4Di
TRPV1wt/wt
TRPV1hM4Di
Cohoused
J
NEU%
ns
ns
*
ns
% in CD45+
30
15
0
TRPV1wt/wt
TRPV1hM4Di
TRPV1wt/wt
TRPV1hM4Di
Cohoused
K
TRPV1wt/wt
TRPV1hM4Di
Cohoused TRPV1wt/wt
Cohoused TRPV1hM4Di