

Supplementary materials

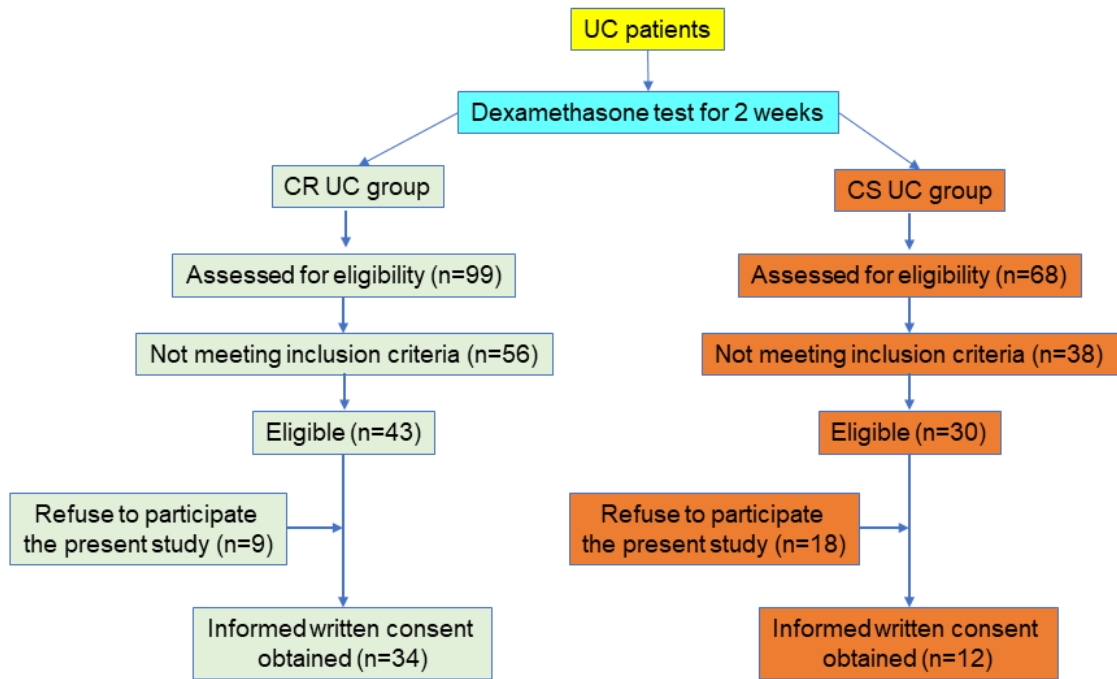


Figure S1. A flow chart shows UC patient selection.

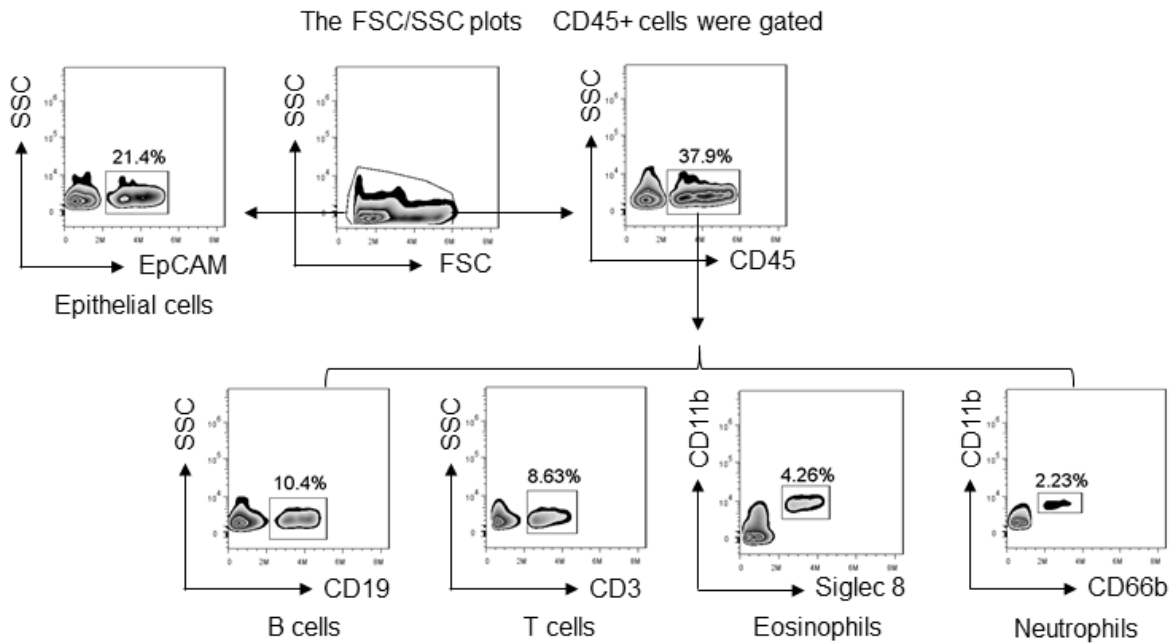


Figure S2. FACS gating procedures. Surgically removed colon tissues from a non-UC patient were used in this experiment to illustrate the FACS gating procedures.

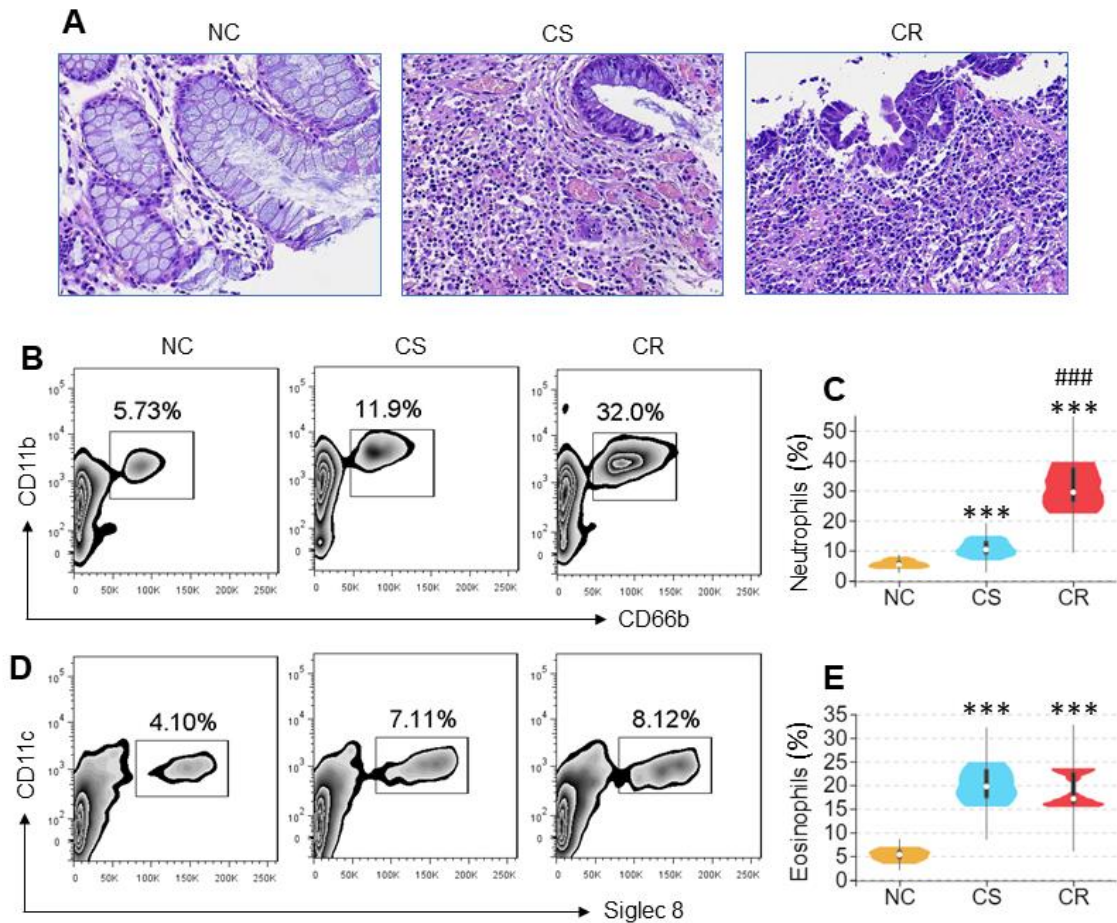


Figure S3. The UC colon tissues of CR patients show high frequency of neutrophils (N). Surgically removed colon tissues were collected from patients with UC and colon cancer, including subjects with corticosteroid resistance (CR group; n=34), or corticosteroid sensitiveness (CS group; n=12). Colon samples from patients with colon cancer without UC were also collected used as non-UC controls (NC; n=8). A, representative colon histology images (original magnification: $\times 200$) show profound inflammatory cell infiltration in the tissues. B-E, lamina propria mononuclear cells (LPMC) were isolated from the colon samples and analyzed by FACS. The gated FACS plots show cell counts of neutrophils (B) and Eo (D). The violin plots show summarized cell counts data of N (C) and Eo (E). ***, $p < 0.001$ (Mann Whitney Test) compared with NC group. ###, $p < 0.001$, compared with CS group. The data of violin plots are presented as mean (IGR) and data range.

Human TW1 amino acid sequence (NM_000474.4)
 MMQDVSSSPVSPADDSLSNSEEPDRQQPPSGKRGGRRSSRRSAGGGAGPGGA
 AGGGVGGGDEPGSPAQGKRGKKSAGCGGGGAGGGGGSSSSGGGSPQSYEELQTQ
 RVMANVRERQRTQSLNEAFAALRKIIPTLP SDKLSKIQTLKLAARYIDFLYQVLQSDELD
 SKMASCSYVAHERLSYAFSVWRMEGAWSMSASH

Figure S4. Three PxxP structures in the amino acid sequence of TW1. Three PxxP structures (in red) in the amino acid sequence of TW1 molecule.

Peptide 1: NLTSLGTLNFPGRTVFSN

Peptide 2: FPQQGQISLSSGETDLK

Human GR α molecular amino acid sequence (GenBank: U01351.1)
 MDSKESLTPGREENPSSVLAQERGDVMDFYKTLRGGATVKVSASSPSLAVASQSDSK
 QRRLLVDFPKGSVSNAAQPDLSKAVSLSMGLYMGETETKVMGNDLGFQQGQISLSS
 GETDLKLLEESIANLNRSTSVPENPKSSASTAVSAAPTEKEFPKTHSDVSSEQQHLKGG
 TGTNGGNVKLYTTDQSTFDILQDLEFSSGSPGKETNESPWRSDDL
 IDENCLLSPLAGEDDSFLEEGNSNEDCKPLILPDTKPKIKDNGDLVLSSPSNVTLPQVKT
 EKEDFIELCTPGVIKQEKLGTVYCQASFPGANIIGNKMSAISVHGVSTSGGQMYHYDMN
 TASLSQQQDQKPIFNVIPPIVGSSENWNRCCQSGDDNLTSLGTLNFPGRTVFSNGYSS
 PSMRPDVSSPPSSSSTATGPPPCLLVCSDASGCHYGLTCGSKVFFKRAVEGR
 QHNYLCAGRNDICIIDKIRRNKCPACRYRKCLQAGMNLEARKTKKKIKGIQQATTGVSQE
 TSENPKNKTIVPATLPQLTPTLVSLLEVIEPEVLYAGYDSSVPDSTWRIMTTLNMLGGRQ
 VIAAVKWAKAIPGFRNLHDDQMTLLQYSWMFLMAFALGWRYSYRQSSANLLCFAPDLII
 NEQRMTLPCMYDQCKHMLYVSSSELHRLQVSYEEYLCMKTLNLLSSVPKDGKLSQELF
 DEIRMTYIKELGKAIVKREGNSSQNWRQFYQLTKLLDSMHEVVENLLNYCFQTFLDKTM
 SIEFPEMLAEIITNQIPKYSNGNIKKLLFHQK

Figure S5. Identification of GR α and in a complex precipitated by an anti-TW1 Ab. A complex in protein extracts of neutrophils isolated from UC colon tissues of patients with CR was analyzed by MS. The two representative peptides indicate that they belong to GR α molecule.

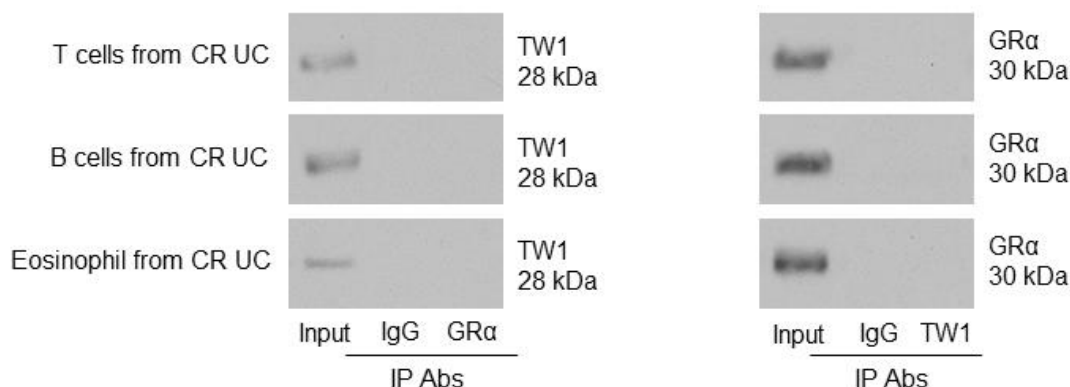


Figure S6. Assessment of TW1/GR α complex in immune cells isolated from CR UC colon tissues. T cells, B cells and eosinophils were isolated from CR UC colon tissues as described and analyzed by co-IP with anti-TW1 Ab and GR α Ab as precipitating Abs and blotting Abs, respectively. Immunoblots show co-IP results. The data are from one experiment that represent 6 independent experiments.

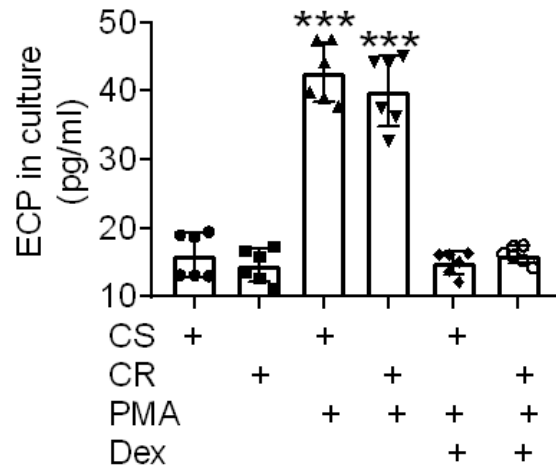


Figure S7. Eosinophils isolated from CR and CS colon tissues do not show CR. Isolated colon eosinophils were treated with the agents listed below the bar graph. CS: Corticosteroid sensitive UC patients. CR: Corticosteroid resistant UC patients. PMA: PMA in the culture at 50 nM. Dex: Dexamethasone in the culture at 1 μ M. The bars show ECP levels in the culture. ***, $p < 0.001$ (ANOVA followed by Dunnett's test), compared with CS alone group.

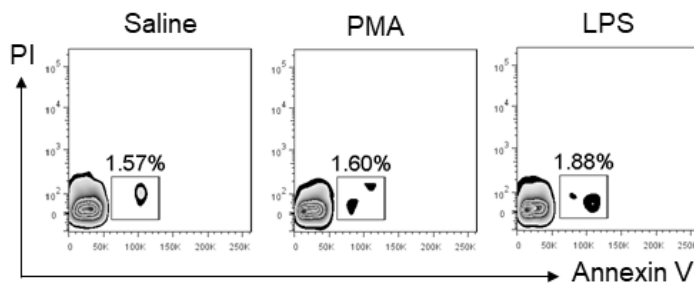


Figure S8. Assessment of neutrophil apoptosis. Isolated CR neutrophils were cultured in the presence of PMA (50 ng/ml) or LPS (250 ng/ml) overnight. The cells were stained with Annexin V reagent and PI, and analyzed by FACS. The gated FACS plots show apoptotic cells. The data represent 3 independent experiments.

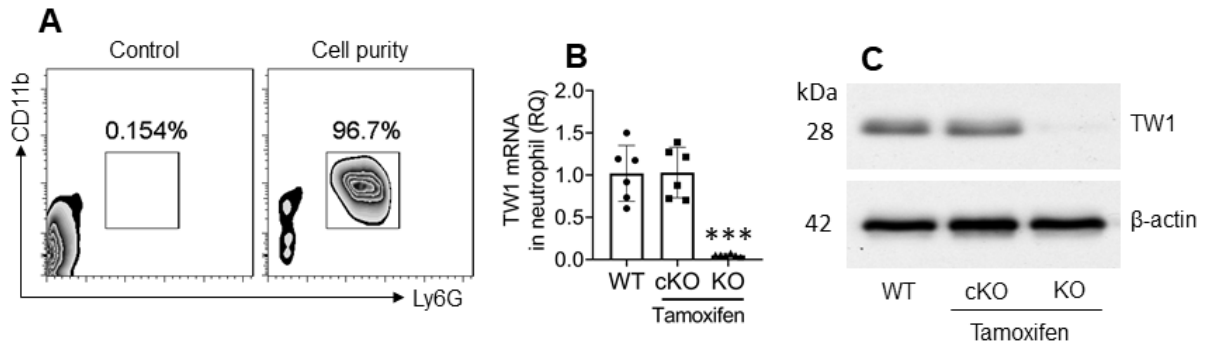


Figure S9. Checking the TW1 expression in neutrophils of mice carrying the TW1-knockout neutrophils. Neutrophils were isolated from the colon tissues of WT mice, mice carrying neutrophils have a WT TW1 gene and a Cre gene (cKO), and mice carrying the TW1-knockout neutrophils (KO) by FACS. A, the gated plots show cell purity of isolated neutrophils. B, the bars show TW1 mRNA levels in neutrophils. C, the immunoblots show TW1 protein levels in neutrophils. Tamoxifen: Mice were treated with tamoxifen daily for one week to activate the TW1-gene-depletion.

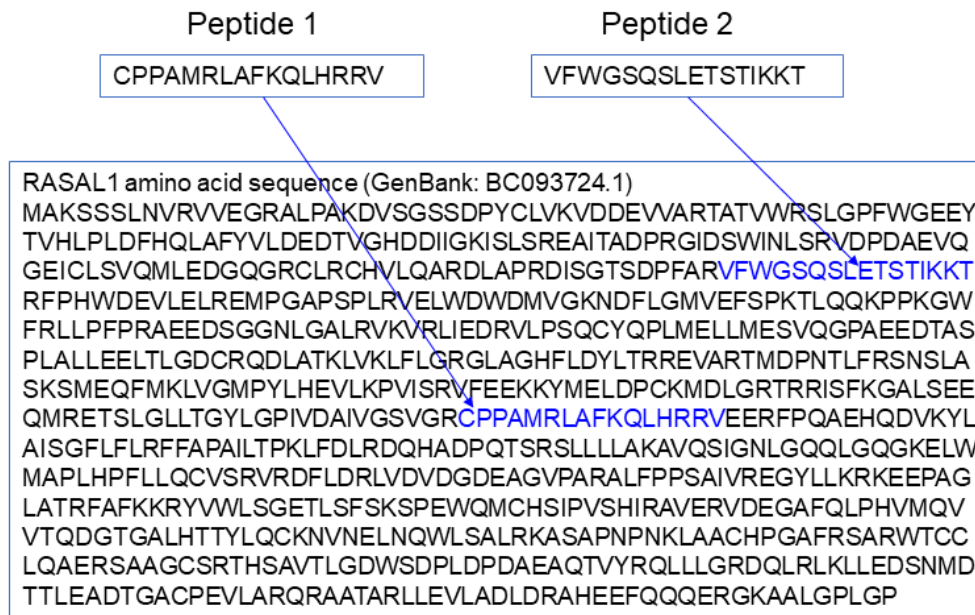


Figure S10. Identification of proteins bound to STAT3 in neutrophils. Proteins were extracted from neutrophils isolated from the colon tissues of UC patients with CR and analyzed by MS. The two representative peptides (the arrows point the original sites; in blue) indicate the protein bound STAT3 is RASAL1L.

Human STAT3 amino acid sequence (NM_139276.3)
 MAQWNQLQLDTRYLEQLHQLYSDSFPMELRQFLAPWIESQDWAYAASKESHATLVFHNLL
 GEIDQQYSRFLQESNVLYQHNLRRIKQFLQSRYLEKPMIARIVARCLWEESRLLQTAATAAQ
 QGGQANHPTAAVTEKQQMLEQHLQDVRKRVQDLEQKMKVVENLQDDDFDFNYKTLKSQG
 DMQDLNGNNQSVTRQKMQLLEQMLTALDQMRRSIVSELAGLLSAMEYVQKTLTDEELADW
 KRRQQIACIGPPNICLDRLLENWITSLAESQLQTRQIQIKLEELQQKVSYKGDPIVQHRPML
 ERIVELFRNLMKSAFVVERQ**PCMPMHP**DRPLVIKTGVQFTTKVRLLVKFPELNYQLKIKVCID
 KDSGDVAALRGRKFNILGTNTKVMNMEESNNGSLSAEFKHLTLREQRCGNGGRANCDAS
 LIVTEELHLITFETEVYHQGLKIDLETHSLPVVVISNICQMPNAWASILWYNMLTNNPKNVNFFT
 KPPIGTWDQVAEVLWSQFSSSTTKRGLSIEQLTTLAEKLLGPGVNYSGCQITWAKFCKENMAG
 KGFSFWWLDNIIDLVKYILALWNEGYIMGFISKERERAILSTKPPGTFLRFSESSKEGGVT
 FTWVEKDISGKTQIQSVEPYTKQQLNMSFAEIIMGYKIMDATNILVSPVLY**PDIP**KEEAFGK
 YCRPESQEHPADPGSAAPYLKTKFICVPTTCSNTIDL**PMS**PRTLDSLMLQFGNNGEGAEPS
 AGGQFESLTFDMELTSECATSPM

Figure S11. PxxP structures in STAT3 amino acid sequence. There are four “PxxP” structures (in red) in the STAT3 amino acid sequence.

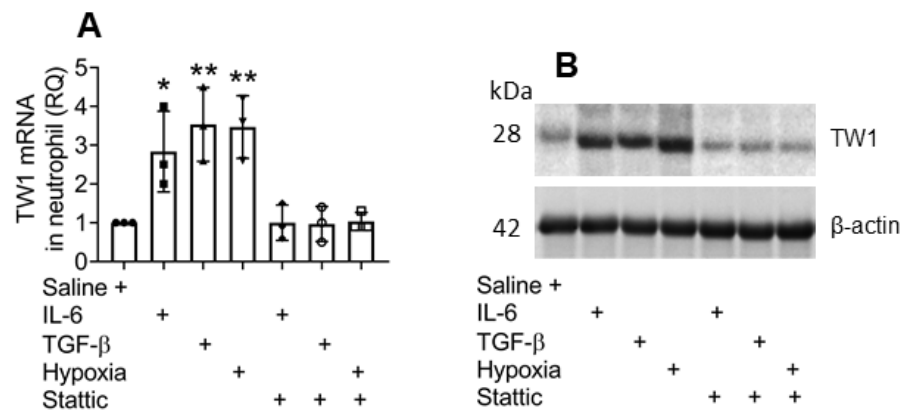


Figure S12. Inhibition of STAT3 attenuates TW1 expression in neutrophils. Neutrophils were isolated from blood samples obtained from healthy human subjects and exposed to IL-6 (50 ng/ml) or TGF-β (10 ng/ml) in the culture, or treated with hypoxia for 24 h. Stattic (an inhibitor of STAT3; 1 μM) was added to the culture in separate wells of each experimental setting. A, the bars indicate TW1 mRNA levels in neutrophils. B, the immunoblots indicate TW1 protein levels in neutrophils. *, p<0.01 (ANOVA followed by the Dunnett’s test), compared with the saline group.

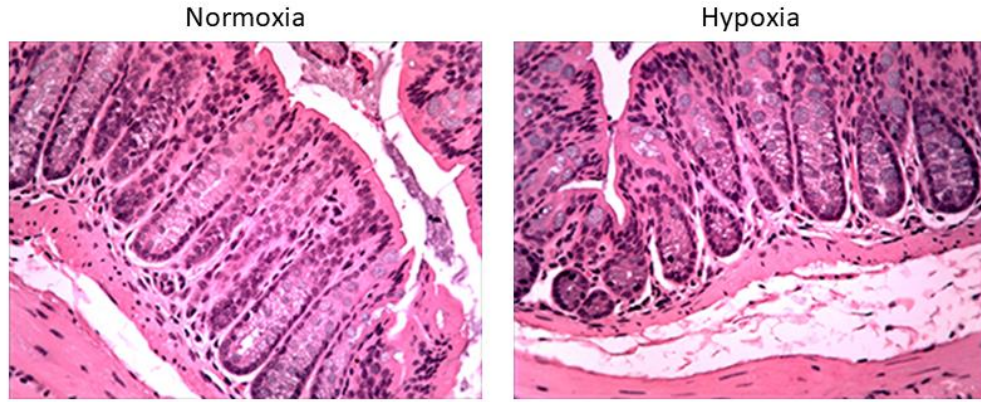


Figure S13. Colon histology of mice treated with normoxia or hypoxia. Used as controls, naïve BALB/c mice were treated with normoxia alone or hypoxia alone daily for one week. Colon segments were excised and processed for paraffin section and HE staining. The representative images show colon tissue structure. Original magnification: $\times 200$.

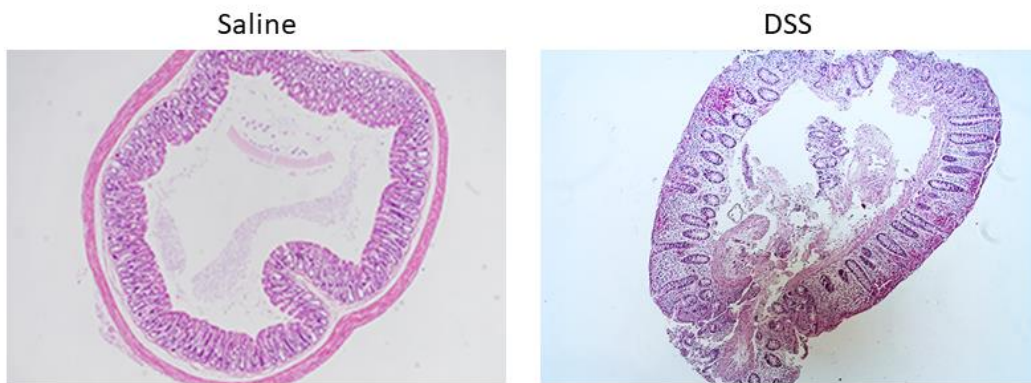


Figure S14. Colon histology of mice carrying TW1-deficient neutrophils. Mice carrying TW1-deficient neutrophils were treated with saline or DSS in the same procedures as described in Fig. 6. Representative images show histology of the colon. Original magnification: $\times 50$. Each group consists of 6 mice.

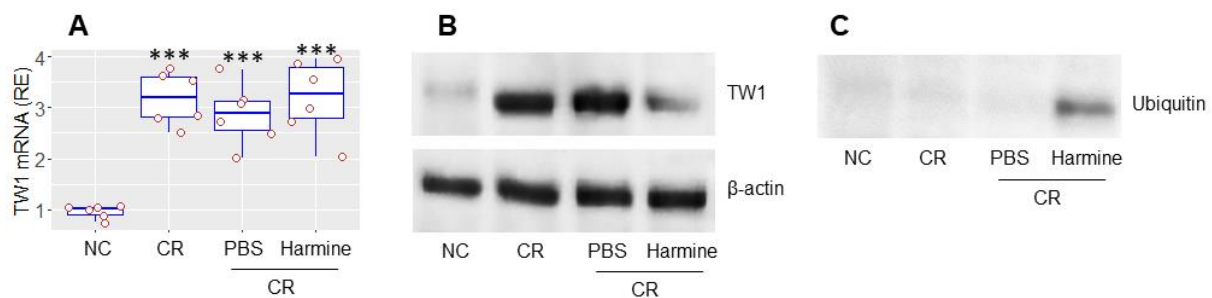


Figure S15. Assessment of the role of harmine in regulating TW1 in neutrophils. Neutrophils were isolated from surgically removed colon tissues of NC (n=6) subjects and CR/UC subjects (n=6), and cultured with the conditions denoted below the graphs for 48 h. Neutrophils were

harvested at the end of culture and analyzed by RT-qPCR and Western blotting. A, boxplots show TW1 mRNA levels in neutrophils. B, immunoblots show TW1 protein levels in neutrophils. C, the PVDF membrane of TW1 blots was processed with the “peel-re-blotting” procedures, and re-blotting with anti-ubiquitin Ab. Immunoblots show ubiquitin levels. Each bubble in boxplots presents data obtained from one sample. ***, $p < 0.001$ (ANOVA + Dunnett’s test), compared with the NC group. The data of panel B and C are from one experiment that represent 6 independent experiments. Harmine = 20 μM .

RNAseq data

1	Case	CR1
2	TLR4	-0.68712598
3	TWIST1	-0.44358750
4	TLR2	1.18547924
5	TLR7	1.28878456
6	NFKB1	-0.71137628
7	ELANE	2.966901374
8	MPO	2.72582631
9	GCR	1.01989631
10	KRAS	0.38960035
11	TNF	0.11251925
12	TLR5	3.12821995
13	FAS	0.07774891
14	FASL	0.26436271
15	P53	0.71148680
16	IKBKB	-0.863841577
17	Case	CR2
18	TLR4	1.96417744
19	TWIST1	1.79655633
20	TLR2	2.12619300
21	TLR7	2.01449800
22	NFKB1	3.36321229
23	ELANE	2.680436516
24	MPO	0.03591331
25	GCR	2.95792496
26	KRAS	2.05092523
27	TNF	1.08278887
28	TLR5	0.90102395
29	FAS	-1.38801371
30	FASL	-0.06661543
31	P53	-1.27696332
32	IKBKB	0.670539501
33	Case	CR3
34	TLR4	0.75243616
35	TWIST1	2.32983646
36	TLR2	0.16422712
37	TLR7	0.50364018
38	NFKB1	2.06068094
39	ELANE	0.196005959
40	MPO	-0.10823946
41	GCR	-0.96559534
42	KRAS	-0.64092700

43 TNF 3.39869110
44 TLR5 1.41860851
45 FAS -1.78160428
46 FASL -2.15011975
47 P53 0.52894928
48 IKBKB 0.304580800
49 Case CR4
50 TLR4 3.23968781
51 TWIST1 0.93991106
52 TLR2 -0.91017805
53 TLR7 2.40630034
54 NFKB1 3.13943856
55 ELANE 2.489153628
56 MPO 1.59584361
57 GCR 3.44498788
58 KRAS 0.03510055
59 TNF 0.30500205
60 TLR5 0.22565391
61 FAS -0.58530470
62 FASL -0.91984948
63 P53 -1.64206644
64 IKBKB 0.373168037
65 Case CR5
66 TLR4 -0.67244489
67 TWIST1 -0.93259568
68 TLR2 -0.72375832
69 TLR7 -0.86158416
70 NFKB1 2.38278776
71 ELANE 3.226432689
72 MPO 0.36675346
73 GCR 0.06210111
74 KRAS 0.91110407
75 TNF 0.88982297
76 TLR5 2.48911739
77 FAS -1.21013470
78 FASL -0.34537670
79 P53 0.01505806
80 IKBKB -0.081377947
81 Case CR6
82 TLR4 -0.80485561
83 TWIST1 1.88880814
84 TLR2 2.46150484
85 TLR7 1.53931365
86 NFKB1 -0.95307987

87 ELANE 1.214824854
88 MPO 3.00803985
89 GCR 3.43147746
90 KRAS 1.90798415
91 TNF -0.87124553
92 TLR5 0.78964649
93 FAS -1.15156574
94 FASL -1.46349254
95 P53 -0.08834014
96 IKBKB -1.083621462
97 Case CR7
98 TLR4 1.88247768
99 TWIST1 2.43708237
100 TLR2 0.20322915
101 TLR7 -0.36005489
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103 ELANE 2.252873896
104 MPO 2.23919411
105 GCR 3.26004675
106 KRAS 0.08919236
107 TNF 0.68460297
108 TLR5 0.99656275
109 FAS 0.49119414
110 FASL -0.09410940
111 P53 -1.75859842
112 IKBKB -0.943420631
113 Case CR8
114 TLR4 1.09053346
115 TWIST1 3.33483878
116 TLR2 2.62525250
117 TLR7 1.60018059
118 NFKB1 2.64057963
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120 MPO -0.84456990
121 GCR 0.99573604
122 KRAS 2.25995849
123 TNF 0.36978208
124 TLR5 -0.12264764
125 FAS 0.18507487
126 FASL -0.72364098
127 P53 -1.73324643
128 IKBKB -1.020138860
129 Case CR9
130 TLR4 0.00972133

131 TWIST1 0.97719498
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133 TLR7 -0.15071077
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136 MPO -0.94167255
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139 TNF 0.24468744
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158 FASL -1.20150465
159 P53 -1.00478373
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162 TLR4 -0.01839248
163 TWIST1 0.22089296
164 TLR2 2.74574465
165 TLR7 1.19257888
166 NFKB1 0.29899553
167 ELANE 3.011491743
168 MPO -0.66524229
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170 KRAS 0.33213961
171 TNF 2.82252641
172 TLR5 3.05409071
173 FAS -1.64035245
174 FASL -0.50455701

175 P53 0.57339373
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180 TLR2 0.23811773
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182 NFKB1 0.32513710
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184 MPO -0.21071366
185 GCR 2.58026023
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187 TNF 0.59406187
188 TLR5 -0.82357393
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196 TLR2 0.83674539
197 TLR7 1.21117514
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200 MPO 2.62815480
201 GCR 3.37284866
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203 TNF 1.88995414
204 TLR5 0.47020548
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206 FASL 0.13191799
207 P53 0.53372144
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212 TLR2 2.03965265
213 TLR7 0.15812619
214 NFKB1 2.82385554
215 ELANE 0.026559046
216 MPO 1.40087041
217 GCR 3.22207976
218 KRAS 2.03658592

219 TNF 3.26269455
220 TLR5 1.79557459
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222 FASL -1.11657175
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228 TLR2 2.38688398
229 TLR7 1.65832838
230 NFKB1 0.63322481
231 ELANE 2.515360357
232 MPO -0.70553272
233 GCR 0.90326361
234 KRAS 2.42229956
235 TNF -0.82790819
236 TLR5 0.60541421
237 FAS -1.01675669
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260 TLR2 0.63586881
261 TLR7 -0.76087055
262 NFKB1 -0.65521876

263 ELANE 3.407629768
264 MPO 1.63259324
265 GCR 2.49832097
266 KRAS 0.46672765
267 TNF -0.96081949
268 TLR5 2.35634451
269 FAS -0.56210378
270 FASL -0.41772743
271 P53 0.21886435
272 IKBKB -1.712531417
273 Case CR18
274 TLR4 2.40664228
275 TWIST1 3.00939059
276 TLR2 0.95032380
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278 NFKB1 2.62037729
279 ELANE 3.159843525
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282 KRAS 0.50589773
283 TNF 3.34032753
284 TLR5 -0.75849825
285 FAS 0.59448857
286 FASL 0.83931024
287 P53 -0.64145117
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292 TLR2 2.86755592
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295 ELANE 2.854303601
296 MPO 1.48468751
297 GCR -0.82986278
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299 TNF 2.32790793
300 TLR5 2.19471432
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302 FASL -0.90597349
303 P53 0.15396124
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306 TLR4 3.22579295

307 TWIST1 3.14529466
308 TLR2 2.42534689
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312 MPO -0.74294479
313 GCR 0.27533842
314 KRAS -0.99670996
315 TNF 3.42510267
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317 FAS -1.98842256
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323 TWIST1 -0.46771070
324 TLR2 2.50868765
325 TLR7 2.59709646
326 NFKB1 2.44865303
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330 KRAS -0.65813105
331 TNF -0.51184676
332 TLR5 0.89945264
333 FAS 0.52970454
334 FASL -0.41153632
335 P53 -0.62168605
336 IKBKB -1.828640169
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340 TLR2 1.26486873
341 TLR7 -0.40870506
342 NFKB1 -0.32287673
343 ELANE -0.243855836
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345 GCR 2.42330808
346 KRAS -0.68327495
347 TNF 0.98237843
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380 TLR5 -0.99925450
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382 FASL 0.92726904
383 P53 -1.48113647
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385 Case CR25
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387 TWIST1 2.62719229
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389 TLR7 0.09079613
390 NFKB1 -0.21090343
391 ELANE 2.825430063
392 MPO 0.41060157
393 GCR 3.33952631
394 KRAS 0.98556896

395 TNF 0.61683418
396 TLR5 -0.61492445
397 FAS -1.99764842
398 FASL -0.15718572
399 P53 0.07285287
400 IKBKB -2.061456747
401 Case CR26
402 TLR4 0.14698725
403 TWIST1 -0.55301936
404 TLR2 -0.81125540
405 TLR7 2.49925679
406 NFKB1 3.34156790
407 ELANE 0.751254260
408 MPO 0.20090513
409 GCR 0.03416019
410 KRAS 2.03486147
411 TNF -0.04502768
412 TLR5 -0.17351294
413 FAS 0.18381280
414 FASL -1.35408317
415 P53 -1.91352347
416 IKBKB -1.273856069
417 Case CR27
418 TLR4 2.36372914
419 TWIST1 2.75113189
420 TLR2 2.75087641
421 TLR7 3.48379017
422 NFKB1 -0.24774763
423 ELANE 1.820368859
424 MPO -0.36723892
425 GCR 0.91024786
426 KRAS -0.15652828
427 TNF 2.73206257
428 TLR5 0.65451321
429 FAS -2.15891621
430 FASL -0.75755730
431 P53 -2.03065845
432 IKBKB -0.815185238
433 Case CR28
434 TLR4 -0.69866310
435 TWIST1 1.28120713
436 TLR2 2.35093401
437 TLR7 -0.86847257
438 NFKB1 0.75600575

439 ELANE 3.468022713
440 MPO -0.65587403
441 GCR 1.79955697
442 KRAS 1.82731242
443 TNF 0.25184842
444 TLR5 0.63394880
445 FAS -0.86264272
446 FASL 0.05100667
447 P53 0.77018233
448 IKBKB -1.716161011
449 Case CR29
450 TLR4 1.32615615
451 TWIST1 -0.57993896
452 TLR2 0.21816052
453 TLR7 -0.20210118
454 NFKB1 1.93586087
455 ELANE 1.704619285
456 MPO 0.07516186
457 GCR 3.26560644
458 KRAS 2.46530833
459 TNF -0.37302067
460 TLR5 -0.71961459
461 FAS -1.43875510
462 FASL -1.29074468
463 P53 -0.26902073
464 IKBKB -1.377418032
465 Case CR30
466 TLR4 2.01936452
467 TWIST1 -0.52343897
468 TLR2 3.02104546
469 TLR7 2.21026226
470 NFKB1 -0.05774033
471 ELANE 3.193286139
472 MPO 2.90757481
473 GCR 2.43210202
474 KRAS 2.47010841
475 TNF -0.35343804
476 TLR5 1.72056378
477 FAS 0.99992923
478 FASL 0.37878184
479 P53 -0.30977395
480 IKBKB -0.694693767
481 Case CR31
482 TLR4 -0.20058494

483 TWIST1 2.32623775
484 TLR2 2.92420292
485 TLR7 2.29834789
486 NFKB1 1.28386083
487 ELANE 2.588147438
488 MPO 3.03632227
489 GCR -0.15308277
490 KRAS -0.11909661
491 TNF 1.68656603
492 TLR5 -0.67223278
493 FAS 0.66315863
494 FASL 0.84639040
495 P53 0.46782031
496 IKBKB -0.380537026
497 Case CR32
498 TLR4 2.07161684
499 TWIST1 0.49027457
500 TLR2 2.08540385
501 TLR7 -0.07046730
502 NFKB1 2.94993429
503 ELANE 2.313198432
504 MPO 1.83010650
505 GCR 3.32159981
506 KRAS 0.14123436
507 TNF -0.56153306
508 TLR5 -0.10509159
509 FAS -0.16160331
510 FASL 0.24487897
511 P53 0.90781418
512 IKBKB -0.338627279
513 Case CR33
514 TLR4 1.88541973
515 TWIST1 -0.52814760
516 TLR2 0.48060327
517 TLR7 3.31257107
518 NFKB1 1.20630885
519 ELANE -0.835479638
520 MPO 2.62650044
521 GCR -0.01936750
522 KRAS -0.30032743
523 TNF 0.96100580
524 TLR5 0.15230126
525 FAS 0.84738177
526 FASL -1.26953621

527 P53 -0.62598614
528 IKBKB -1.808931093
529 Case CR34
530 TLR4 1.35451742
531 TWIST1 2.41818137
532 TLR2 1.77238071
533 TLR7 1.06822339
534 NFKB1 -0.29008608
535 ELANE 1.894641702
536 MPO 3.37915944
537 GCR 0.92857771
538 KRAS 1.95369571
539 TNF 0.76152267
540 TLR5 -0.44486944
541 FAS -0.23780702
542 FASL -0.78588475
543 P53 0.54165449
544 IKBKB 0.590722483
545 Case CS1
546 TLR4 -1.91617819
547 TWIST1 0.21703582
548 TLR2 0.63208493
549 TLR7 -1.05759056
550 NFKB1 -1.60600234
551 ELANE -1.670798733
552 MPO 0.44582402
553 GCR -1.19730863
554 KRAS -0.11408166
555 TNF -1.53079166
556 TLR5 0.11081331
557 FAS 0.01610904
558 FASL 0.04612262
559 P53 0.52558018
560 IKBKB 0.781607668
561 Case CS2
562 TLR4 0.79064137
563 TWIST1 -0.98791178
564 TLR2 -0.36810504
565 TLR7 -0.87750903
566 NFKB1 -0.07458511
567 ELANE -1.829979494
568 MPO -1.43190058
569 GCR -0.85537168
570 KRAS 0.18653482

571 TNF -0.69888010
572 TLR5 -0.65677541
573 FAS 0.06864689
574 FASL 0.03285200
575 P53 0.52769821
576 IKBKB -0.947274562
577 Case CS3
578 TLR4 -1.17980306
579 TWIST1 -0.47191294
580 TLR2 0.35140712
581 TLR7 -1.39007637
582 NFKB1 0.77414820
583 ELANE -0.420394886
584 MPO -1.96732515
585 GCR -1.46747333
586 KRAS -0.55083493
587 TNF 0.23908286
588 TLR5 -0.03525878
589 FAS -0.62597222
590 FASL -0.75150608
591 P53 0.05114987
592 IKBKB -0.364605348
593 Case CS4
594 TLR4 -1.20747959
595 TWIST1 -1.87229378
596 TLR2 -1.11502018
597 TLR7 0.13542458
598 NFKB1 -1.59942666
599 ELANE -1.621675825
600 MPO -1.43304906
601 GCR -1.87418095
602 KRAS -1.75279755
603 TNF 0.80140364
604 TLR5 -0.43072939
605 FAS 0.22156247
606 FASL 0.63431364
607 P53 1.02573213
608 IKBKB -0.106936762
609 Case CS5
610 TLR4 -0.80678737
611 TWIST1 -0.91524222
612 TLR2 0.83432388
613 TLR7 -1.61513445
614 NFKB1 -0.98566762

615 ELANE -0.027041740
616 MPO -0.33275154
617 GCR 0.66710253
618 KRAS -1.54539394
619 TNF 0.55516440
620 TLR5 -1.50890306
621 FAS -0.63270525
622 FASL -0.36613984
623 P53 0.27965714
624 IKKBK -0.081503478
625 Case CS6
626 TLR4 -0.52046012
627 TWIST1 0.89705746
628 TLR2 -1.72940907
629 TLR7 -1.48704529
630 NFKB1 -1.31309310
631 ELANE 0.712510907
632 MPO -1.49995383
633 GCR -1.13420338
634 KRAS -1.09756596
635 TNF -1.87275564
636 TLR5 -0.31439299
637 FAS 0.41996953
638 FASL 0.53631804
639 P53 -0.21611255
640 IKKBK -0.607721753
641 Case CS7
642 TLR4 -0.13522719
643 TWIST1 0.56979981
644 TLR2 -0.28240124
645 TLR7 0.32297808
646 NFKB1 -1.72666511
647 ELANE -1.095487594
648 MPO -1.40809356
649 GCR -1.05866018
650 KRAS 0.67648840
651 TNF -1.65415954
652 TLR5 -1.06590585
653 FAS -0.80290371
654 FASL 1.02994108
655 P53 0.93078688
656 IKKBK 1.233548817
657 Case CS8
658 TLR4 -0.46086511

659 TWIST1 0.11275207
660 TLR2 0.07167195
661 TLR7 -0.47729720
662 NFKB1 -0.49942986
663 ELANE -1.894723778
664 MPO 0.16832369
665 GCR -0.65574806
666 KRAS -0.14376994
667 TNF 0.41165935
668 TLR5 0.93723883
669 FAS 0.59149884
670 FASL -0.12560480
671 P53 -0.71474772
672 IKBKB 1.189507729
673 Case CS9
674 TLR4 0.05137840
675 TWIST1 0.63661488
676 TLR2 -1.23140043
677 TLR7 -1.55721354
678 NFKB1 0.64903691
679 ELANE -0.796901744
680 MPO -0.40897787
681 GCR -0.81076882
682 KRAS 0.58927054
683 TNF 0.18523866
684 TLR5 -0.50168332
685 FAS -0.83418128
686 FASL 1.00426551
687 P53 -0.69722286
688 IKBKB 1.096094704
689 Case CS10
690 TLR4 0.63720970
691 TWIST1 0.20227326
692 TLR2 -1.54234076
693 TLR7 -1.40871170
694 NFKB1 0.78359527
695 ELANE 0.005388105
696 MPO -0.67916926
697 GCR 0.24758493
698 KRAS 0.79749209
699 TNF -0.57404087
700 TLR5 0.28898534
701 FAS 1.06830448
702 FASL 1.03344012

703 P53 0.10573464
704 IKBKB 0.406900958
705 Case CS11
706 TLR4 0.91570299
707 TWIST1 0.34058798
708 TLR2 0.79231152
709 TLR7 0.45723103
710 NFKB1 -0.21987084
711 ELANE 0.959635089
712 MPO 0.32735930
713 GCR 0.57685039
714 KRAS -1.20439277
715 TNF -0.60266507
716 TLR5 0.24930949
717 FAS -0.51940477
718 FASL 0.15869162
719 P53 -0.94189508
720 IKBKB -0.570522750
721 Case CS12
722 TLR4 -0.98285515
723 TWIST1 -0.50508538
724 TLR2 -1.26040164
725 TLR7 -0.53851589
726 NFKB1 0.09973467
727 ELANE -1.623950480
728 MPO -0.87461525
729 GCR -0.47836682
730 KRAS 0.06831245
731 TNF 0.37901915
732 TLR5 -0.41087490
733 FAS 0.79090381
734 FASL -0.44944342
735 P53 -0.04419648
736 IKBKB -0.900111783
737 Case NC1
738 TLR4 -0.87891891
739 TWIST1 -1.30618983
740 TLR2 0.37152646
741 TLR7 -1.17612846
742 NFKB1 0.23624269
743 ELANE -0.189718273
744 MPO -1.39407892
745 GCR 0.82905126
746 KRAS -1.90783721

747 TNF -1.02184732
748 TLR5 0.72832850
749 FAS 0.87156890
750 FASL 0.70256997
751 P53 1.15186593
752 IKKBK 0.213092722
753 Case NC2
754 TLR4 -0.62565554
755 TWIST1 -1.90765719
756 TLR2 -1.71965026
757 TLR7 -0.45272755
758 NFKB1 -1.72189575
759 ELANE 0.551224969
760 MPO -0.69881195
761 GCR -1.60188065
762 KRAS -1.51884118
763 TNF 0.03957763
764 TLR5 -0.37183645
765 FAS 0.26909745
766 FASL -0.52980807
767 P53 1.25441649
768 IKKBK -0.006637377
769 Case NC3
770 TLR4 -1.15376825
771 TWIST1 -1.57354893
772 TLR2 -0.91818135
773 TLR7 -1.85011531
774 NFKB1 0.19740610
775 ELANE -1.701890782
776 MPO -0.47747884
777 GCR -0.66000399
778 KRAS -1.95502358
779 TNF 0.38079496
780 TLR5 -0.68666972
781 FAS 0.25839576
782 FASL -0.85135032
783 P53 -0.35521648
784 IKKBK 1.275251247
785 Case NC4
786 TLR4 -1.52555965
787 TWIST1 -1.12857708
788 TLR2 0.66251322
789 TLR7 -1.30263693
790 NFKB1 0.32108073

791 ELANE 0.899099471
792 MPO 0.88821532
793 GCR 0.77920350
794 KRAS 0.61235804
795 TNF -0.20768564
796 TLR5 -1.06608456
797 FAS -0.14359508
798 FASL 0.01540689
799 P53 -0.03875096
800 IKKBK 1.474491294
801 Case NC5
802 TLR4 0.56754905
803 TWIST1 -1.54958554
804 TLR2 -0.43901643
805 TLR7 -0.97015498
806 NFKB1 -1.55395991
807 ELANE 0.252097492
808 MPO -0.60330739
809 GCR -0.40120933
810 KRAS 0.09742885
811 TNF -0.20044751
812 TLR5 -1.56852562
813 FAS -0.73469211
814 FASL 0.58792331
815 P53 1.38061895
816 IKKBK 1.255136750
817 Case NC6
818 TLR4 -1.88813912
819 TWIST1 0.48116058
820 TLR2 -0.36080209
821 TLR7 0.19836664
822 NFKB1 -1.48759102
823 ELANE 0.456315948
824 MPO -1.59688306
825 GCR -0.09053130
826 KRAS 0.21881552
827 TNF -1.90593025
828 TLR5 -0.28653885
829 FAS -0.65574564
830 FASL -0.25996285
831 P53 0.97874239
832 IKKBK 1.372863318
833 Case NC7
834 TLR4 -0.35259296

835 TWIST1 -1.78195351
836 TLR2 0.80510938
837 TLR7 -1.85757360
838 NFKB1 0.24157416
839 ELANE -1.453589589
840 MPO -1.21589968
841 GCR 0.51937020
842 KRAS -1.38443083
843 TNF -0.64409009
844 TLR5 -0.15260244
845 FAS 1.36284886
846 FASL -0.32064879
847 P53 1.01125845
848 IKBKB -0.811012844
849 Case NC8
850 TLR4 0.67058970
851 TWIST1 0.04054484
852 TLR2 -0.71318395
853 TLR7 0.04815973
854 NFKB1 -1.51101505
855 ELANE -1.572730650
856 MPO -0.35744430
857 GCR -1.57974926
858 KRAS -1.69696374
859 TNF 0.37842296
860 TLR5 -0.28756756
861 FAS 1.45513517
862 FASL 1.17727865
863 P53 -0.75886827
864 IKBKB 0.279848280