

**Supplementary Table 2: The differentially expressed Transcription factor in UC epithelium and colonoid (Relate to Figure 2D)**

The differentially expressed transcription factors between inflamed vs uninflamed in UC epithelium

	p_val	avg_log2FC	pct.1	pct.2	p_val_adj
<b>IRF1</b>	3.220E-15	0.633	0.539	0.249	6.231E-11
<b>STAT1</b>	3.038E-12	0.515	0.359	0.141	5.880E-08
<b>STAT3</b>	6.409E-12	0.281	0.645	0.374	1.240E-07
<b>CEBPD</b>	2.096E-11	0.463	0.465	0.224	4.056E-07
<b>HES6</b>	2.806E-09	0.380	0.335	0.141	5.430E-05
<b>HIF1A</b>	4.056E-09	0.271	0.359	0.166	7.848E-05
<b>XBP1</b>	9.188E-09	0.468	0.722	0.540	1.778E-04
<b>RBCK1</b>	1.525E-08	0.301	0.518	0.300	2.951E-04
<b>ZNF511</b>	2.870E-08	0.298	0.437	0.242	5.555E-04
<b>HMGN3</b>	2.873E-08	0.392	0.539	0.335	5.559E-04
<b>GTF3A</b>	3.519E-08	0.396	0.510	0.300	6.810E-04
<b>NFIC</b>	4.003E-08	0.323	0.363	0.176	7.747E-04
<b>RUNX1</b>	8.142E-08	0.267	0.216	0.074	1.575E-03
<b>FOS</b>	4.606E-07	-0.502	0.902	0.924	8.912E-03
<b>DNMT1</b>	6.881E-07	0.347	0.298	0.145	1.332E-02
<b>EHF</b>	7.749E-07	0.320	0.514	0.339	1.500E-02
<b>HMGA1</b>	8.961E-07	0.430	0.551	0.395	1.734E-02

The differentially expressed transcription factors between TNF treated vs. Untreated in colonoid

	<b>p_val</b>	<b>avg_log2FC</b>	<b>pct.1</b>	<b>pct.2</b>	<b>p_val adj</b>
<b>Nfic</b>	2.856E-277	0.233	0.631	0.438	4.947E-273
<b>Irf1</b>	8.304E-182	0.126	0.431	0.276	1.438E-177
<b>Hmga1</b>	5.935E-133	0.064	0.251	0.143	1.028E-128
<b>Cebpd</b>	1.804E-91	0.117	0.577	0.451	3.125E-87
<b>Stat1</b>	2.415E-71	0.047	0.224	0.146	4.183E-67
<b>Hes6</b>	1.714E-52	-0.243	0.759	0.725	2.969E-48
<b>Rbck1</b>	3.474E-50	0.040	0.521	0.411	6.016E-46
<b>Ehf</b>	4.427E-49	-0.224	0.779	0.730	7.667E-45
<b>Zfp511</b>	1.930E-45	0.020	0.332	0.252	3.342E-41
<b>Dnmt1</b>	3.571E-45	0.044	0.419	0.329	6.185E-41
<b>Runx1</b>	5.568E-45	0.027	0.395	0.306	9.644E-41
<b>Fos</b>	2.700E-42	0.075	0.634	0.526	4.677E-38
<b>Stat3</b>	4.589E-36	0.031	0.530	0.431	7.947E-32
<b>Xbp1</b>	3.181E-33	0.052	0.811	0.709	5.509E-29
<b>Hif1a</b>	1.047E-25	0.003	0.542	0.449	1.814E-21
<b>Gtf3a</b>	6.862E-07	-0.041	0.711	0.619	1.188E-02
<b>Hmgn3</b>	1.242E-01	-0.003	0.003	0.004	1.000E+00