

**Supplementary Table 4: The raw cell count for M cell rescue (Relate to Figure 4E)
The raw cell count for TNF α stimulated samples**

KO_1											
	No treatment				H2O2				Paraquat		
	UEA-1	DAPI	%		UEA-1	DAPI	%		UEA-1	DAPI	%
Location 1	44	310	14.19		31	266	11.65		29	176	16.48
Location 2	168	662	25.38		41	248	16.53		27	250	10.80
Location 3	182	579	31.43		36	277	13.00		62	313	19.81
Location 4	60	201	29.85		11	188	5.85		62	411	15.09
Location 5	77	357	21.57		11	368	2.99		38	168	22.62
Location 6	119	516	23.06		5	252	1.98		103	460	22.39
Location 7	165	615	26.83		188	567	33.16		57	270	21.11
		AVE	24.62			AVE	12.17			AVE	18.33

KO_2											
	No treatment				H2O2				Paraquat		
	UEA-1	DAPI	%		UEA-1	DAPI	%		UEA-1	DAPI	%
Location 1	128	604	21.19		48	325	14.77		52	214	24.30
Location 2	64	391	16.37		54	480	11.25		60	389	15.42
Location 3	35	448	7.81		31	486	6.38		56	388	14.43
Location 4	11	354	3.11		38	345	11.01		42	341	12.32
Location 5	205	518	39.58		0	234	0.00		40	336	11.90
Location 6	64	384	16.67		36	309	11.65		60	385	15.58
Location 7	138	488	28.28		48	518	9.27		64	526	12.17
		AVE	19.00			AVE	9.19			AVE	15.16

KO_3											
	No treatment				H2O2				Paraquat		
	UEA-1	DAPI	%		UEA-1	DAPI	%		UEA-1	DAPI	%
Location 1	187	400	46.75		85	330	25.76		100	189	52.91
Location 2	209	396	52.78		59	217	27.19		55	172	42.97
Location 3	83	220	37.73		20	155	12.90		138	332	41.57
Location 4	204	346	58.96		50	220	22.73		83	128	48.26
Location 5	133	223	59.64		37	162	22.84		117	231	50.65
Location 6	124	242	51.24		71	276	25.72		99	168	58.93
Location 7	76	198	38.38		59	219	26.94		46	106	43.40
		AVE	49.35			AVE	23.44			AVE	48.38

KO_4

	No treatment				H2O2				Paraquat		
	UEA-1	DAPI	%		UEA-1	DAPI	%		UEA-1	DAPI	%
Location 1	113	637	17.74		32	338	9.47		13	156	8.33
Location 2	75	502	14.94		100	446	22.42		28	199	14.07
Location 3	215	492	43.70		30	245	12.24		31	341	9.09
Location 4	80	349	22.92		15	404	3.71		53	186	28.49
Location 5	140	300	46.67		10	323	3.10		45	145	31.03
Location 6	52	299	17.39		49	193	25.39		20	199	10.05
Location 7	245	769	31.86		62	180	34.44		65	387	16.80
		AVE	27.89			AVE	15.83			AVE	16.84

KO_5

	No treatment				H2O2				Paraquat		
	UEA-1	DAPI	%		UEA-1	DAPI	%		UEA-1	DAPI	%
Location 1	75	380	19.74		8	164	4.88		86	282	30.50
Location 2	97	542	17.90		94	490	19.18		11	277	3.97
Location 3	138	671	20.57		2	195	1.03		85	256	33.20
Location 4	45	459	9.80		17	307	5.54		23	249	9.24
Location 5	125	212	58.96		4	137	2.92		33	287	11.50
Location 6	129	493	26.17		77	323	23.84		141	662	21.30
Location 7	189	702	26.92		108	626	17.25		15	357	4.20
		AVE	25.72			AVE	10.66			AVE	16.27

KO_6

	No treatment				H2O2				Paraquat		
	UEA-1	DAPI	%		UEA-1	DAPI	%		UEA-1	DAPI	%
Location 1	71	279	25.45		35	236	14.83		15	125	12.00
Location 2	76	280	27.14		48	216	22.22		57	309	18.45
Location 3	68	313	21.73		38	210	18.10		36	276	13.04
Location 4	49	175	28.00		10	183	5.46		46	219	21.00
Location 5	100	377	26.53		85	368	23.10		109	275	39.64
Location 6	105	446	23.54		85	368	23.10		105	253	41.50
Location 7	95	398	23.87		70	357	19.61		61	392	15.56
		AVE	25.18			AVE	18.06			AVE	23.03

The raw cell count for RANKL Stimulated samples

KO_1

	No treatment				H2O2				Paraquat		
	UEA-1	DAPI	%		UEA-1	DAPI	%		UEA-1	DAPI	%
Location 1	221	758	29.16		9	232	3.88		44	236	18.64
Location 2	116	535	21.68		26	416	6.25		92	420	21.90
Location 3	71	696	10.20		7	304	2.30		59	420	14.05
Location 4	40	286	13.99		7	296	2.36		47	407	11.55
Location 5	192	495	38.79		7	279	2.51		143	464	30.82
Location 6	21	192	10.94		77	449	17.15		38	236	16.10
Location 7	33	554	5.96		80	445	17.98		77	550	14.00
		AVE	18.67				7.49				18.15

KO_2

	No treatment				H2O2				Paraquat		
	UEA-1	DAPI	%		UEA-1	DAPI	%		UEA-1	DAPI	%
Location 1	174	749	23.23		99	481	20.58		58	245	23.67
Location 2	130	606	21.45		182	571	31.87		53	420	12.62
Location 3	276	424	65.09		49	512	9.57		66	402	16.42
Location 4	20	503	3.98		10	217	4.61		31	279	11.11
Location 5	45	330	13.64		15	285	5.26		61	306	19.93
Location 6	91	573	15.88		3	185	1.62		90	498	18.07
Location 7	48	513	9.36		73	545	13.39		35	337	10.39
		AVE	21.80				12.42				16.03

KO_3

	No treatment				H2O2				Paraquat		
	UEA-1	DAPI	%		UEA-1	DAPI	%		UEA-1	DAPI	%
Location 1	306	677	45.20		206	639	32.24		56	227	24.67
Location 2	191	561	34.05		216	541	39.93		103	343	30.03
Location 3	122	302	40.40		64	314	20.38		151	313	48.24
Location 4	161	400	40.25		88	324	27.16		29	113	25.66
Location 5	70	264	26.52		39	198	19.70		81	249	32.53
Location 6	104	242	42.98		54	227	23.79		96	206	46.60
Location 7	139	284	48.94		116	433	26.79		51	182	28.02
		AVE	39.76				27.14				33.68

KO_4

	No treatment				H2O2				Paraquat		
	UEA-1	DAPI	%		UEA-1	DAPI	%		UEA-1	DAPI	%
Location 1	476	1270	37.48		44	634	6.94		8	305	2.62
Location 2	167	502	33.27		121	492	24.59		27	423	6.38
Location 3	171	745	22.95		104	579	17.96		48	622	7.72
Location 4	67	726	9.23		48	423	11.35		21	408	5.15
Location 5	516	842	61.28		36	426	8.45		5	186	2.69
Location 6	47	675	6.96		46	276	16.67		23	486	4.73
Location 7	192	896	21.43		418	1573	26.57		285	750	38.00
		AVE	27.51				16.08				9.61

KO_5

	No treatment				H2O2				Paraquat		
	UEA-1	DAPI	%		UEA-1	DAPI	%		UEA-1	DAPI	%
Location 1	235	884	26.58		120	564	21.28		214	653	32.77
Location 2	38	159	23.90		63	564	11.17		78	550	14.18
Location 3	96	520	18.46		114	533	21.39		34	506	6.72
Location 4	83	559	14.85		6	281	2.14		40	335	11.94
Location 5	147	589	24.96		4	208	1.92		45	317	14.20
Location 6	264	932	28.33		124	456	27.19		81	372	21.77
Location 7	188	502	37.45		55	490	11.22		148	774	19.12
		AVE	24.93				13.76				17.24

KO_6

	No treatment				H2O2				Paraquat		
	UEA-1	DAPI	%		UEA-1	DAPI	%		UEA-1	DAPI	%
Location 1	138	368	37.50		254	670	37.91		77	244	31.56
Location 2	178	431	41.30		106	331	32.02		96	225	26.82
Location 3	96	378	25.40		88	327	26.91		56	204	27.45
Location 4	96	283	33.92		26	177	14.69		112	358	49.78
Location 5	72	253	28.46		30	199	15.08		32	138	23.19
Location 6	160	361	44.32		61	292	20.89		32	220	14.55
Location 7	90	375	24.00		148	459	32.24		125	314	39.81
		AVE	33.56				25.68				30.45

The summary of M cell percentage and statistical test for TNF α and RANKL stimulated samples

	KO_1	KO_2	KO_3	KO_4	KO_5	KO_6
RANK_No treatment	18.67	21.80	39.76	27.51	24.93	33.56
RANK_H2O2	7.49	12.42	27.14	16.08	13.76	25.68
RANK_PARA	18.15	16.03	33.68	9.61	17.24	30.45
TNF α _No treatment	24.62	19.00	49.35	27.89	25.72	25.18
TNF α _H2O2	12.17	9.19	23.44	15.83	10.66	18.06
TNF α _PARA	18.33	15.16	48.38	16.84	16.27	23.03

Wilcoxon test summary

GROUP1	GROUP2	P VALUE	P VALUE SUMMARY
KO_TNF α _H2O2	KO_TNF α _No treatment	0.0312	*
KO_TNF α _paraquat	KO_TNF α _No treatment	0.0312	*
KO_RANKL_H2O2	KO_RANKL_No treatment	0.0312	*
KO_RANKL_Paraquat	KO_RANKL_No treatment	0.0312	*

