

Table 40 The inhibitory effects of compounds **83-97** on the neutrophil superoxide formation (*in vitro*)

Animal: Rat Inducer: fMLP 0.3 μ M/5 μ g/ml cytochalasin B

No.	Conc. (μ M)	Superoxide Formation		N
		nmol/10 ⁶ cells/30mins	(%inh.)	
Control		1.15 \pm 0.11	--	3
83	10	0.77 \pm 0.11 *	32.3 \pm 4.1	4
	30	0.89 \pm 0.13	20.2 \pm 9.2	4
84	10	1.16 \pm 0.08	-3.2 \pm 6.7	5
	30	0.92 \pm 0.15	22.0 \pm 6.3	5
85	10	1.00 \pm 0.21	14.8 \pm 9.6	5
	30	1.17 \pm 0.11	-4.3 \pm 9.9	5
86	10	1.01 \pm 0.07	18.6 \pm 3.8	4
	30	0.84 \pm 0.09	20.2 \pm 5.2	4
87	10	0.71 \pm 0.15 **	40.6 \pm 6.8	4
	30	0.92 \pm 0.15 *	28.0 \pm 9.3	5
88	10	0.93 \pm 0.22	22.2 \pm 10.6	5
	30	0.87 \pm 0.16	25.8 \pm 10.0	5
89	10	1.08 \pm 0.11	3.4 \pm 3.1	5
	30	1.33 \pm 0.13	-17.5 \pm 9.6	4
90	10	0.81 \pm 0.09 *	28.5 \pm 7.0	5
	30	1.10 \pm 0.24	6.7 \pm 14.2	5
91	10	1.34 \pm 0.18	-9.0 \pm 5.8	4
	30	1.41 \pm 0.04	-29.5 \pm 12.9	3
92	10	1.19 \pm 0.19	14.2 \pm 15.8	4
	30	1.53 \pm 0.14	-38.9 \pm 13.2	3
93	10	1.34 \pm 0.10	-21.6 \pm 11.2	3
	30	1.09 \pm 0.37	-27.4 \pm 0.5	4
94	10	1.27 \pm 0.07	-15.8 \pm 10.1	3
	30	1.52 \pm 0.24	-28.4 \pm 5.0	4
95	10	0.78 \pm 0.10 *	29.2 \pm 3.8	3
	30	0.99 \pm 0.47	11.5 \pm 8.5	3
96	10	0.91 \pm 0.17	25.0 \pm 14.1	4
	30	0.82 \pm 0.10 *	32.0 \pm 9.5	4
97	10	1.03 \pm 0.12	16.8 \pm 2.1	5
	30	0.64 \pm 0.13 *	44.7 \pm 7.6	3
TFP	1	1.42 \pm 0.15	-29.4 \pm 12.0	3
	10	0.25 \pm 0.08 **	77.1 \pm 7.2	3
	30	0.08 \pm 0.03 **	93.0 \pm 3.0	3
IC ₅₀ (μ M)		14.7 \pm 0.4		

N=3 ; * P<0.05, ** P<0.01; TFP:Trifluoperazine (positive control)

Table 42 The inhibitory effects of compounds **139-153** on the neutrophil superoxide formation (*in vitro*)

Animal: Rat Inducer: fMLP 0.3 μ M/5 μ g/ml cytochalasin B

No.	Conc. (μ M)	Superoxide Formation		N
		nmol/10 ⁶ cells/30mins	(%inh.)	
Control		1.39 \pm 0.07	--	6
139	10	1.12 \pm 0.05	18.3 \pm 7.5	3
	30	1.05 \pm 0.07	25.1 \pm 11.9	3
140	10	1.12 \pm 0.09	19.4 \pm 6.5	3
	30	0.79 \pm 0.09 **	42.8 \pm 8.1	3
141	10	0.98 \pm 0.05	29.2 \pm 5.7	3
	30	0.87 \pm 0.06 *	36.8 \pm 6.9	3
142	10	1.19 \pm 0.09	14.7 \pm 5.4	3
	30	1.07 \pm 0.06	21.9 \pm 8.2	3
143	10	0.99 \pm 0.22	30.0 \pm 11.3	3
	30	0.86 \pm 0.09 **	38.5 \pm 5.7	3
144	3	1.12 \pm 0.02	27.2 \pm 12.1	3
	10	0.74 \pm 0.14 **	45.9 \pm 8.9	6
	30	0.54 \pm 0.12 **	60.7 \pm 5.9	6
IC ₅₀		15.4 \pm 1.3		
145	10	1.24 \pm 0.17	10.0 \pm 14.7	3
	30	1.33 \pm 0.04	3.8 \pm 3.6	3
146	10	0.93 \pm 0.09 *	32.6 \pm 7.8	3
	30	1.08 \pm 0.12	22.8 \pm 4.8	3
147	10	1.03 \pm 0.04	24.9 \pm 6.2	3
	30	1.43 \pm 0.16	-2.0 \pm 5.8	3
148	10	1.15 \pm 0.21	18.3 \pm 11.0	3
	30	0.77 \pm 0.04 **	44.8 \pm 0.4	3
149	10	1.13 \pm 0.08	18.7 \pm 4.4	3
	30	1.42 \pm 0.10	-2.2 \pm 5.0	3
150	10	1.19 \pm 0.09	13.8 \pm 9.9	3
	30	1.31 \pm 0.17	6.5 \pm 8.4	3
151	10	0.92 \pm 0.16 **	38.2 \pm 4.9	5
	30	0.85 \pm 0.13 *	34.4 \pm 6.0	4
152	10	1.11 \pm 0.04	28.8 \pm 9.8	3
	30	1.00 \pm 0.24 **	39.9 \pm 5.4	3
153	10	1.53 \pm 0.24	6.3 \pm 0.7	3
	30	1.11 \pm 0.34	22.8 \pm 13.4	3
TFP	3	1.68 \pm 0.15	-29.4 \pm 12.0	3
	10	0.30 \pm 0.08 **	77.1 \pm 7.2	3
	30	0.08 \pm 0.03 **	93.0 \pm 3.0	3
IC ₅₀ (μ M)		14.7 \pm 0.4		

N=3 ; * P<0.05, ** P<0.01; TFP : Trifluoperazine (positive control)

Table 41 The inhibitory effects of compounds **109-123** on the neutrophil superoxide formation (*in vitro*)

Animal: Rat Inducer: fMLP 0.3 μ M/5 μ g/ml cytochalasin B

No.	Conc. (μ M)	Superoxide Formation		N
		Nmol/10 ⁶ cells/30mins	(%inh.)	
Control		1.82 \pm 0.11	--	3
109	10	1.58 \pm 0.15	11.5 \pm 14.5	3
	30	1.68 \pm 0.08	6.6 \pm 9.7	3
110	10	1.30 \pm 0.11 *	27.2 \pm 11.0	3
	30	1.41 \pm 0.19	22.4 \pm 10.0	3
111	10	1.86 \pm 0.11	-2.7 \pm 10.5	3
	30	1.37 \pm 0.03	24.3 \pm 3.7	3
112	10	1.92 \pm 0.21	-4.6 \pm 7.4	3
	30	1.67 \pm 0.18	8.4 \pm 7.7	3
113	10	1.49 \pm 0.32	19.8 \pm 12.7	3
	30	1.56 \pm 0.19	14.9 \pm 5.5	3
114	10	1.35 \pm 0.07	25.4 \pm 5.0	3
	30	1.18 \pm 0.14 **	35.1 \pm 5.5	3
115	10	1.29 \pm 0.08 **	28.5 \pm 7.2	3
	30	1.74 \pm 0.27	5.9 \pm 11.0	3
116	10	1.43 \pm 0.07	21.3 \pm 4.2	3
	30	1.67 \pm 0.17	9.1 \pm 4.6	3
117	10	1.34 \pm 0.31 **	26.0 \pm 8.3	3
	30	1.18 \pm 0.18 **	34.3 \pm 6.9	3
118	10	1.22 \pm 0.36 **	31.8 \pm 11.4	3
	30	1.12 \pm 0.17 **	37.7 \pm 6.6	3
119	10	1.25 \pm 0.38 **	30.8 \pm 9.1	3
	30	1.35 \pm 0.15 **	25.5 \pm 4.6	3
120	10	1.38 \pm 0.09 **	23.8 \pm 4.7	3
	30	1.54 \pm 0.06	15.2 \pm 2.4	3
121	10	1.31 \pm 0.39 **	27.6 \pm 10.3	3
	30	1.31 \pm 0.27 **	27.6 \pm 7.1	3
122	10	1.08 \pm 0.33 **	39.9 \pm 10.3	3
	30	0.93 \pm 0.04 **	48.7 \pm 1.8	3
123	10	1.28 \pm 0.40 **	29.6 \pm 10.3	3
	30	0.91 \pm 0.10 **	49.8 \pm 3.7	3
TFP	3	1.44 \pm 0.22	20.5 \pm 5.3	3
	10	1.01 \pm 0.16 **	42.9 \pm 2.8	3
	30	0.03 \pm 0.02 **	98.2 \pm 0.9	3
IC ₅₀ (μ M)		13.0 \pm 0.3		

N=3 ; * P<0.05, ** P<0.01; TFP:Trifluoperazine (positive control)

不要的 對於 fMLP 誘導的嗜中性白血球去顆粒作用抑制試驗 (*in vitro*) Animal: Rat
 Inducer: fMLP (10 μ g/ml)

No.	R1	R2	R3	Conc. (μ M)	Superoxide Formation		N
					nmol/10 ⁶ cells/30mins (%inh)	(%inh.)	
83	H	H	H	(10)	0.77 \pm 0.11 *	32.3 \pm 4.1	4
				(30)	0.89 \pm 0.13	20.2 \pm 9.2	4
84	CH ₃	H	H	(10)	1.16 \pm 0.08	-3.2 \pm 6.7	5
				(30)	0.92 \pm 0.15	22.0 \pm 6.3	5
85	H	CH ₃	H	(10)	1.00 \pm 0.21	14.8 \pm 9.6	5
				(30)	1.17 \pm 0.11	-4.3 \pm 9.9	5
86	H	H	CH ₃	(10)	1.01 \pm 0.07	18.6 \pm 3.8	4
				(30)	0.84 \pm 0.09	20.2 \pm 5.2	4
87	H	OCH ₃	H	(10)	0.71 \pm 0.15 **	40.6 \pm 6.8	4
				(30)	0.92 \pm 0.15 *	28.0 \pm 9.3	5
88	H	H	OCH ₃	(10)	0.93 \pm 0.22	22.2 \pm 10.6	5
				(30)	0.87 \pm 0.16	25.8 \pm 10.0	5
89	F	H	H	(10)	1.08 \pm 0.11	3.4 \pm 3.1	5
				(30)	1.33 \pm 0.13	-17.5 \pm 9.6	4
90	H	F	H	(10)	0.81 \pm 0.09 *	28.5 \pm 7.0	5
				(30)	1.10 \pm 0.24	6.7 \pm 14.2	5
91	H	H	F	(10)	1.34 \pm 0.18	-9.0 \pm 5.8	4
				(30)	1.41 \pm 0.04	-29.5 \pm 12.9	3
92	Cl	H	H	(10)	1.19 \pm 0.19	14.2 \pm 15.8	4
				(30)	1.53 \pm 0.14	-38.9 \pm 13.2	3
93	H	Cl	H	(10)	1.34 \pm 0.10	-21.6 \pm 11.2	3
				(30)	1.09 \pm 0.37	-27.4 \pm 0.5	4
94	H	H	Cl	(10)	1.27 \pm 0.07	-15.8 \pm 10.1	3
				(30)	1.52 \pm 0.24	-28.4 \pm 5.0	4
95	NO ₂	H	H	(10)	0.78 \pm 0.10 *	29.2 \pm 3.8	3
				(30)	0.99 \pm 0.47	11.5 \pm 8.5	3
96	H	NO ₂	H	(10)	0.91 \pm 0.17	25.0 \pm 14.1	4
				(30)	0.82 \pm 0.10 *	32.0 \pm 9.5	4
97	H	H	NO ₂	(10)	1.03 \pm 0.12	16.8 \pm 2.1	5
				(30)	0.64 \pm 0.13 *	44.7 \pm 7.6	3
Mepacirne				(10)	1.42 \pm 0.15	-29.4 \pm 12.0	3
				(30)	0.25 \pm 0.08 **	77.1 \pm 7.2	3
				(100)	0.08 \pm 0.03 **	93.0 \pm 3.0 **	3
IC ₅₀	50.2 \pm 4.5						