

Table 26 The inhibitory effects of compounds **68-79** on the mast cell degranulation (*in vitro*)

Inducer: Compound 48/80 (10 μ g/ml)

animal: Rat

compound	(μ M)	percent release			
		-Glucuronidase	(% inhibition)	Histamine	(% inhibition)
Control		42.7 \pm 1.7	--	70.2 \pm 1.4	--
68	30	36.7 \pm 2.6	14.3 \pm 3.7	66.3 \pm 1.6	5.5 \pm 2.2
	100	34.2 \pm 2.6**	20.2 \pm 3.8	65.8 \pm 1.9	6.4 \pm 2.3
69	30	36.0 \pm 2.8	16.0 \pm 4.4	63.9 \pm 2.7	9.0 \pm 3.7
	100	33.9 \pm 1.7**	20.8 \pm 2.5	66.2 \pm 0.7	5.6 \pm 2.7
70	30	35.8 \pm 1.1	15.7 \pm 6.2	65.3 \pm 3.0	7.0 \pm 3.2
	100	29.9 \pm 2.6**	29.5 \pm 7.6	62.1 \pm 0.9	11.5 \pm 1.5
71	30	37.0 \pm 0.8	13.3 \pm 1.6	68.0 \pm 0.6	3.0 \pm 2.7
	100	35.0 \pm 2.8*	18.3 \pm 5.0	70.1 \pm 2.3	0.2 \pm 3.3
72	30	39.5 \pm 1.9	7.0 \pm 7.8	67.0 \pm 1.4	4.5 \pm 1.5
	100	34.6 \pm 2.8*	19.0 \pm 6.5	68.4 \pm 0.8	2.5 \pm 1.4
73	30	35.1 \pm 1.6*	17.7 \pm 3.7	62.8 \pm 2.2	10.7 \pm 3.4
	100	29.8 \pm 1.6**	30.2 \pm 3.9	62.5 \pm 1.6	11.0 \pm 1.2
74	30	36.0 \pm 1.8	15.7 \pm 2.9	65.5 \pm 2.0	6.7 \pm 1.9
	100	28.8 \pm 3.3**	32.8 \pm 6.0	63.5 \pm 1.8	9.7 \pm 1.0
75	30	34.5 \pm 3.4	12.7 \pm 4.7	66.6 \pm 1.6	5.1 \pm 2.5
	100	37.0 \pm 2.9	13.7 \pm 3.5	67.2 \pm 1.5	4.3 \pm 2.1
76	30	39.1 \pm 1.9	8.7 \pm 1.0	69.4 \pm 3.7	1.1 \pm 5.0
	100	36.8 \pm 2.7	14.2 \pm 3.2	67.2 \pm 3.3	4.4 \pm 2.9
77	30	32.7 \pm 4.6**	24.0 \pm 6.7	63.0 \pm 3.6	10.3 \pm 4.4
	100	27.5 \pm 4.4**	36.4 \pm 7.9	58.8 \pm 3.0	16.4 \pm 3.3
78	30	33.8 \pm 3.5**	21.4 \pm 5.3	66.9 \pm 4.7	4.9 \pm 4.8
	100	38.3 \pm 3.0	10.7 \pm 3.5	70.9 \pm 0.7	-1.0 \pm 2.9
79	30	36.0 \pm 3.4	15.9 \pm 5.4	66.9 \pm 0.4	4.7 \pm 2.5
	100	35.8 \pm 4.5	16.9 \pm 7.5	66.9 \pm 1.6	4.7 \pm 1.5
Mepacirne	10	28.5 \pm 0.7**	33.1 \pm 4.2	59.8 \pm 2.0	14.8 \pm 2.9
	30	12.7 \pm 3.0**	70.4 \pm 6.1	28.0 \pm 2.4**	60.1 \pm 3.0
	100	1.2 \pm 0.5**	97.3 \pm 1.2	12.6 \pm 0.8**	82.0 \pm 1.4
IC ₅₀		24.3 \pm 2.2		43.8 \pm 1.9	

N=3 ; * P<0.05, ** P<0.01; Mepacirne: positive control

Table 27 The inhibitory effects of compounds **80-82, 124-138** on the mast cell degranulation (*in vitro*)

Inducer: Compound 48/80 (10 µg/ml)

animal: Rat

Compound	(µM)	Percent Release			
		-Glucuronidase	(% inh.)	Histamine	(% inh.)
Control		34.8 ± 2.6	--	64.8 ± 2.8	--
80	30	33.6 ± 2.9	3.0 ± 8.2	60.7 ± 4.0	6.6 ± 5.4
	100	29.9 ± 2.9	14.1 ± 4.3	58.7 ± 2.5	9.6 ± 2.0
81	30	34.9 ± 1.9	2.3 ± 5.5	53.6 ± 7.2	18.0 ± 8.1
	100	28.8 ± 1.7	16.9 ± 4.9	56.2 ± 5.2	13.6 ± 6.8
82	30	33.9 ± 2.9	2.3 ± 5.4	60.8 ± 3.3	6.5 ± 1.1
	100	31.9 ± 2.3	8.1 ± 6.1	59.2 ± 3.7	9.1 ± 1.7
124	30	36.1 ± 3.6	-4.1 ± 10.2	60.8 ± 1.3	6.2 ± 2.2
	100	33.2 ± 3.1	4.3 ± 8.9	54.0 ± 1.9	16.8 ± 2.1
125	30	33.6 ± 2.9	3.2 ± 7.3	67.8 ± 2.0	-4.7 ± 5.9
	100	31.3 ± 3.5	9.6 ± 10.8	61.2 ± 3.1	5.8 ± 3.5
126	30	32.8 ± 3.4	6.1 ± 5.3	66.4 ± 7.4	-1.5 ± 6.9
	100	30.0 ± 2.7	13.6 ± 6.4	63.3 ± 0.8	2.1 ± 3.8
127	30	33.8 ± 3.9	3.2 ± 7.2	66.5 ± 2.9	-2.3 ± 0.6
	100	32.5 ± 3.7	6.9 ± 5.9	69.5 ± 2.4	-7.1 ± 1.0
128	30	31.7 ± 3.2	9.2 ± 5.3	59.3 ± 3.4	8.7 ± 3.7
	100	29.2 ± 4.1	16.9 ± 5.2	58.5 ± 5.1	10.1 ± 6.2
129	30	33.7 ± 3.9	3.6 ± 7.4	55.4 ± 3.6	14.9 ± 1.8
	100	31.6 ± 2.9	9.3 ± 1.7	55.3 ± 4.0	15.1 ± 2.8
130	30	32.9 ± 3.1	5.2 ± 6.6	62.8 ± 2.6	3.3 ± 1.8
	100	30.6 ± 2.5	11.8 ± 6.2	62.5 ± 2.9	3.8 ± 0.3
131	30	31.9 ± 2.8	8.3 ± 6.2	61.7 ± 2.0	4.9 ± 1.1
	100	31.0 ± 4.2	11.5 ± 6.7	63.8 ± 5.9	2.3 ± 4.5
132	30	33.1 ± 3.6	5.3 ± 4.5	64.5 ± 3.4	0.9 ± 2.0
	100	31.8 ± 5.3	9.4 ± 9.6	62.4 ± 6.2	4.4 ± 5.6
133	30	31.4 ± 3.2	10.2 ± 3.9	59.3 ± 2.5	8.7 ± 1.0
	100	30.2 ± 4.6	13.9 ± 8.6	61.3 ± 7.5	6.3 ± 7.0
134	30	33.8 ± 3.4	3.0 ± 7.1	58.3 ± 0.8	10.0 ± 2.7
	100	31.2 ± 3.1	10.6 ± 3.4	56.3 ± 2.6	13.3 ± 1.0
135	30	32.2 ± 3.9	7.8 ± 7.0	57.3 ± 3.9	12.0 ± 2.1
	100	30.0 ± 2.1	13.6 ± 4.8	56.7 ± 2.8	12.6 ± 4.4
136	30	32.3 ± 3.2	7.1 ± 7.0	61.1 ± 3.5	6.2 ± 1.3
	100	30.1 ± 3.0	13.5 ± 7.5	58.3 ± 3.8	0.4 ± 2.2
137	30	32.1 ± 3.2	7.9 ± 3.9	58.5 ± 3.3	10.0 ± 2.3
	100	29.3 ± 3.8	16.3 ± 6.0	56.8 ± 4.0	12.7 ± 2.3
138	30	31.9 ± 3.5	8.7 ± 4.1	55.1 ± 4.2	15.4 ± 2.5
	100	32.1 ± 2.0	7.6 ± 3.4	59.5 ± 2.4	8.3 ± 1.1
Mepacrine	10	23.2 ± 0.7	** 33.1 ± 4.2	55.3 ± 2.0	14.8 ± 2.9
	30	10.4 ± 3.0	** 70.4 ± 6.1	25.9 ± 2.4**	60.1 ± 3.0
	100	0.9 ± 0.5	** 97.3 ± 1.2	11.7 ± 0.8**	82.0 ± 1.4
IC ₅₀ (µM)		24.3 ± 2.2		43.8 ± 1.9	

N=3; ** P<0.01; Mepacrine : positive control