

Table 1. Effect of PTX (1 μ g/mL, 2.5 Hours at 37°C) on Eosinophil Aggregation Induced by PAF, C5a, and LTB₄

	Aggregation (% maximal response induced by PMA)	
	Control	PTX
PAF (10 ⁻⁸ mol/L)	16.3 \pm 4.2	13.3 \pm 5.2
C5a (10 ⁻⁷ mol/L)	24.8 \pm 2.5	0*
LTB ₄ (10 ⁻⁸ mol/L)	20.5 \pm 1.2	5.0 \pm 2.0*

Values are the mean \pm SEM of three to four experiments.

* P < .01 when compared with control values.

effect in eosinophils (eg, Teixeira et al¹³). As shown in Fig 5B, the PKA inhibitor, H89, at a concentration (10⁻⁵ mol/L) shown previously to inhibit PKA in intact neutrophils,²¹ significantly enhanced PAF-, C5a-, and LTB₄-induced eosinophil aggregation.

Effect of the protein kinase inhibitors Ro 31-8220 and staurosporine on Ca²⁺ mobilization in eosinophils. The effect of Ro 31-8220 and staurosporine on the Ca²⁺ transient evoked by PAF, C5a, and LTB₄ is shown in Table 2. Data are expressed as the area under the curve, which takes into account both the amplitude and the duration of the Ca²⁺ signal. Whereas PAF-induced Ca²⁺ mobilization was abolished in eosinophils pretreated with Ro 31-8220 (3 \times 10⁻⁵ mol/L), equivalent responses elicited by LTB₄ and C5a were significantly enhanced. This effect was due predominantly to an increase in the duration rather than the peak height of the Ca²⁺ transient (see Fig 6 for a typical LTB₄ response). Lower concentrations of C5a and LTB₄ were affected similarly by pretreatment with Ro 31-8220 (data not shown). In

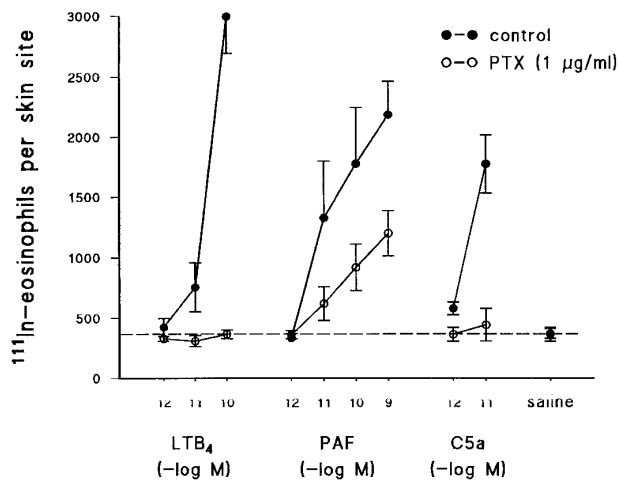


Fig 3. Effect of PTX on the recruitment of ¹¹¹In-eosinophils in response to intradermal injection of C5a, LTB₄, or PAF. Eosinophils were pretreated for 2.5 hours with PTX (1 μ g/mL, see the Materials and Methods) or vehicle. The cells were then labeled with ¹¹¹In and injected intravenously (2.5 \times 10⁶ cells/animal) into recipient guinea pigs. ¹¹¹In-eosinophil recruitment was measured 1 hour after the intradermal injection of PAF (10⁻¹² to 10⁻¹⁰ mol/site), C5a (10⁻¹² and 10⁻¹¹ mol/site), and LTB₄ (10⁻¹² to 10⁻¹⁰ mol/site). The dashed line across the graph represents background values in response to injection of saline. Results are the mean \pm SEM of five pairs of animals.

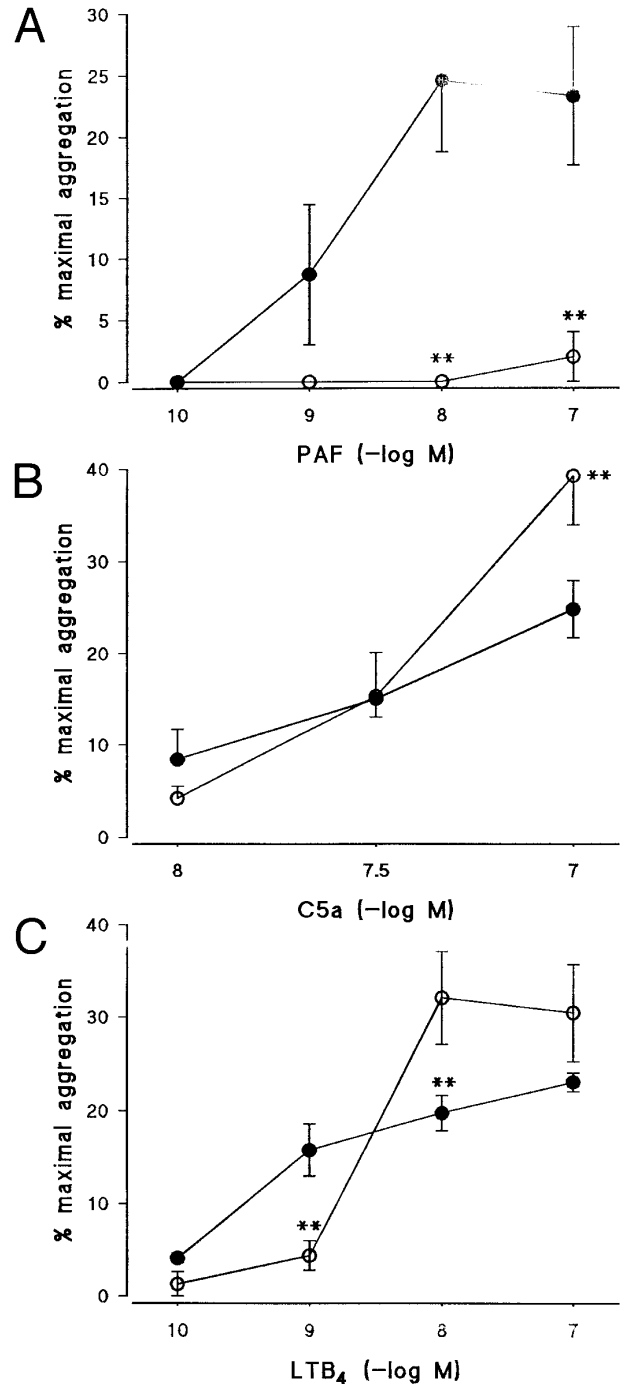


Fig 4. Effect of the PKC inhibitor, Ro 31-8220, on eosinophil aggregation induced by (A) PAF, (B) C5a, or (C) LTB₄. Eosinophils were pretreated for 3 minutes with Ro 31-8220 (3 \times 10⁻⁵ mol/L, open symbols) or vehicle (solid symbols) before the addition of PAF (10⁻¹⁰ mol/L to 10⁻⁷ mol/L), C5a (10⁻⁸ mol/L or 10⁻⁷ mol/L), or LTB₄ (10⁻¹⁰ mol/L to 10⁻⁷ mol/L). Results are expressed as the percentage of maximal aggregation induced by PMA (10⁻⁷ mol/L) and each point is the mean \pm SEM for three to five experiments. ** P < .01 when compared with control values.