

24.1-25.9



26.6

97.4

66.0

45.0

31.0

21.5

14.4

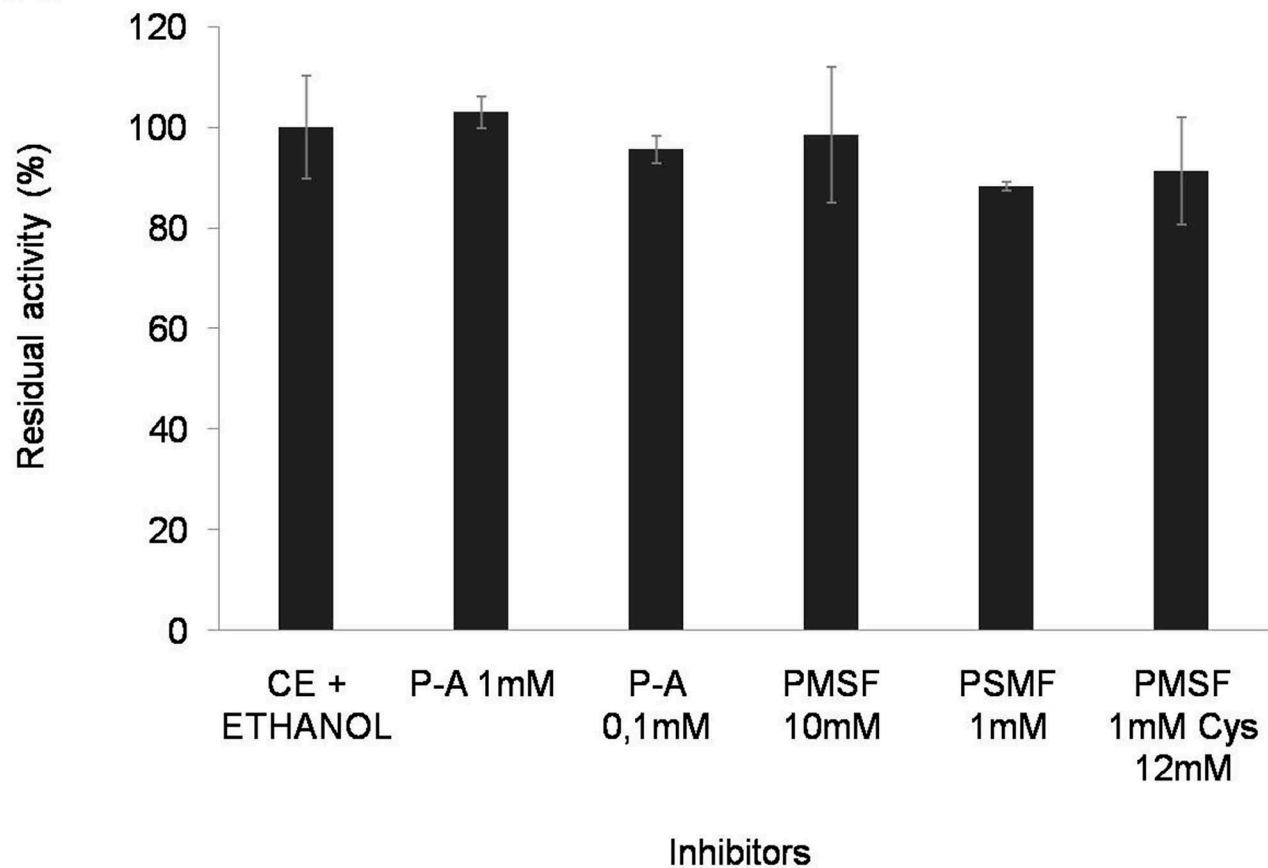
6.5

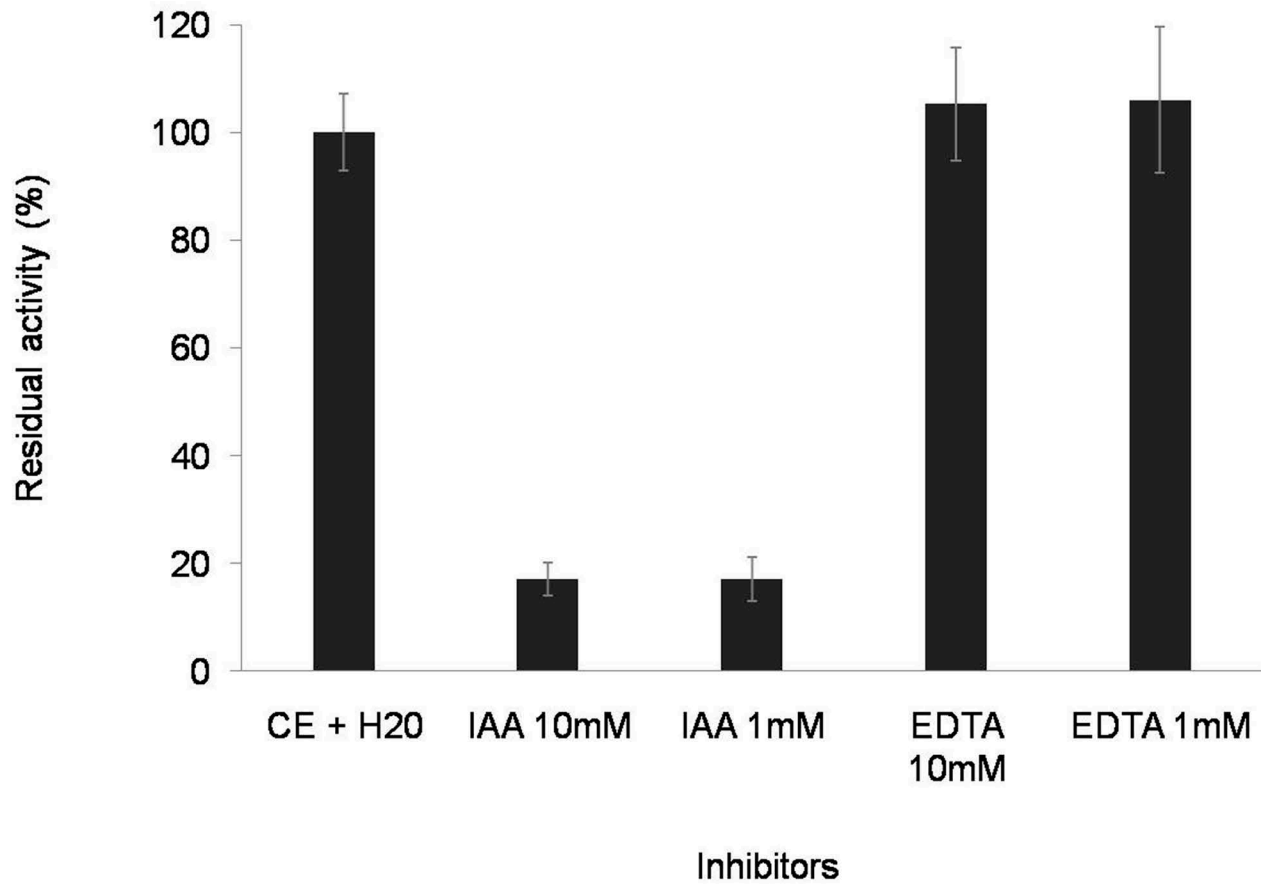
14.4

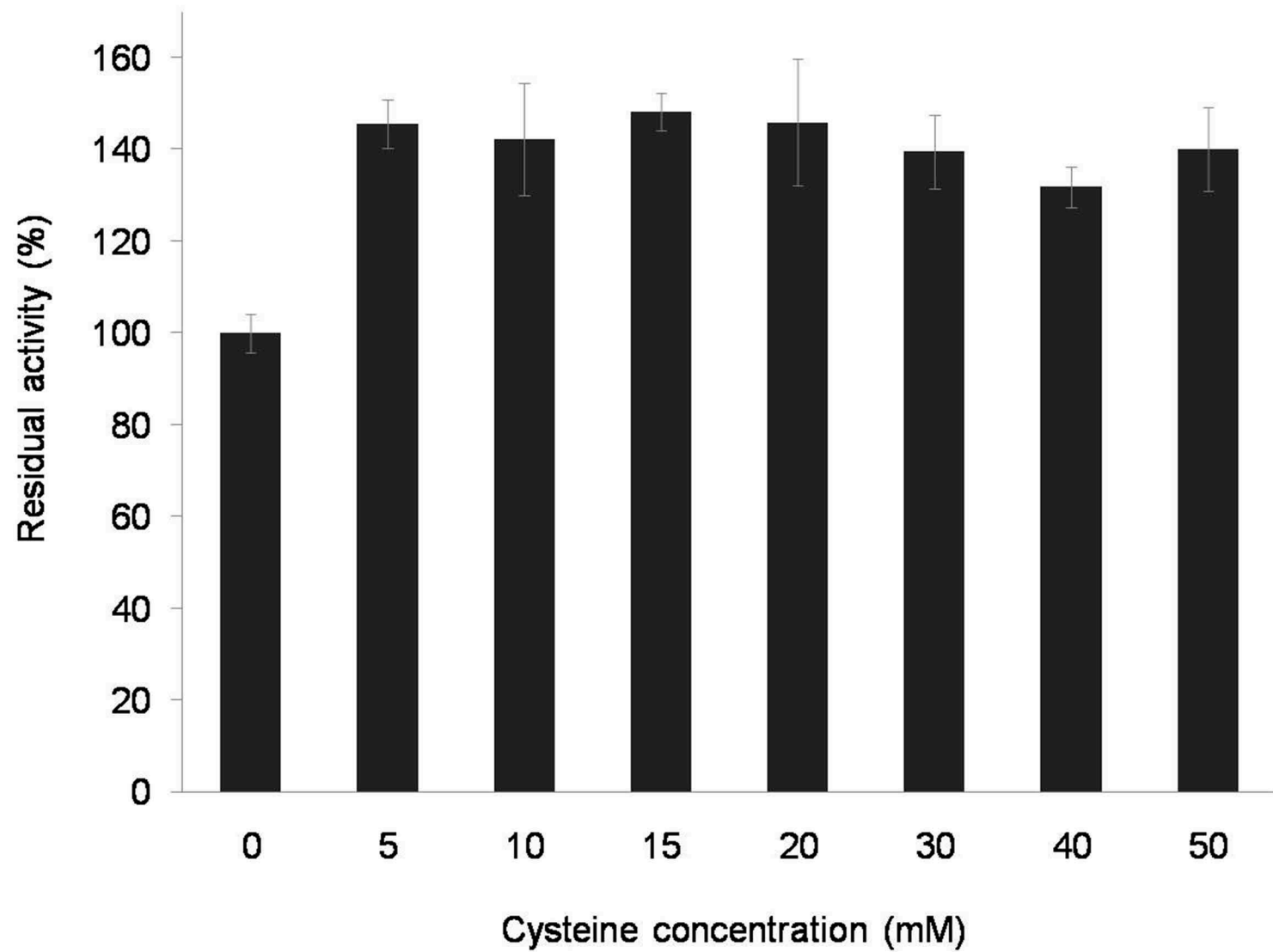
CE

P

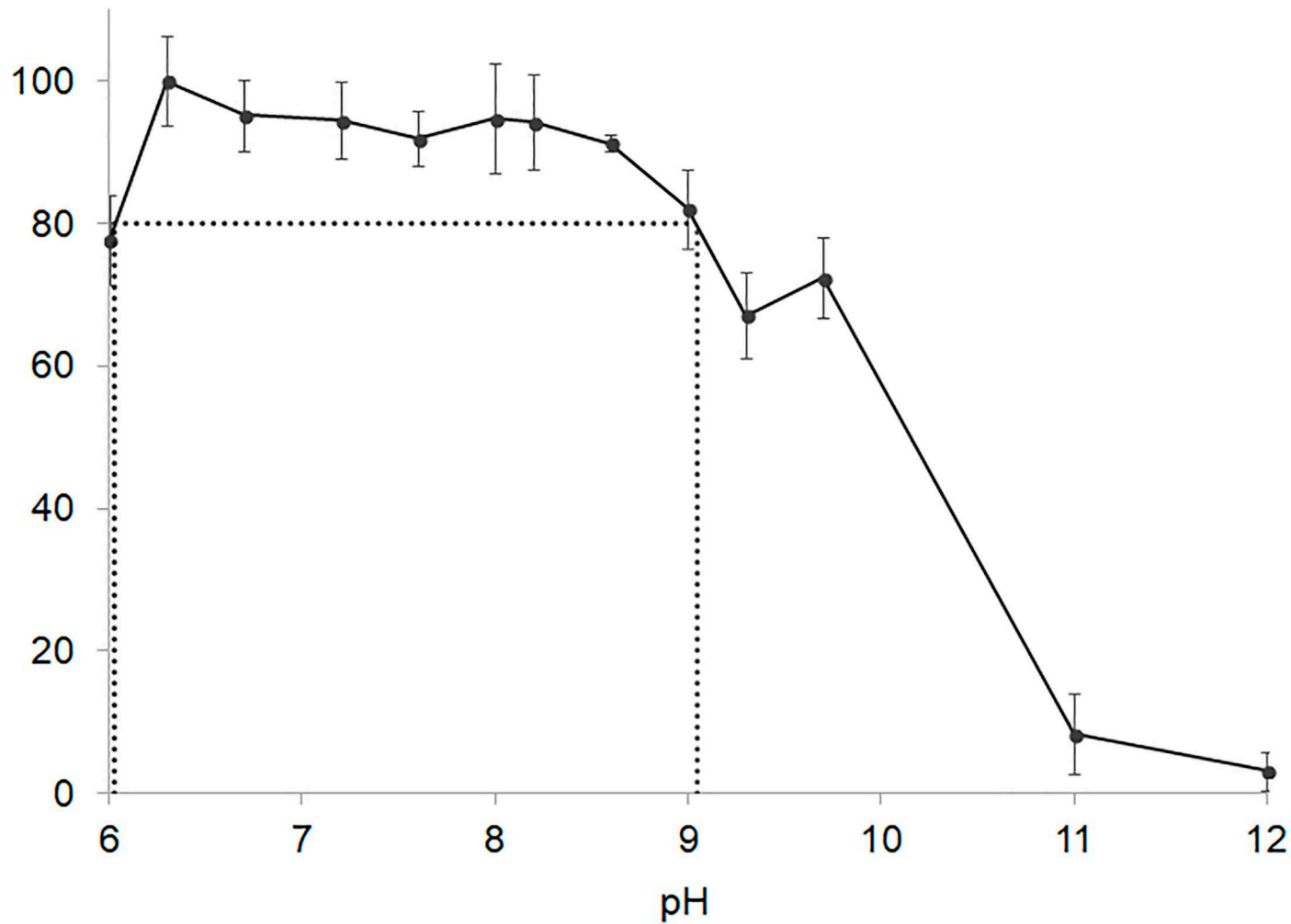
LR

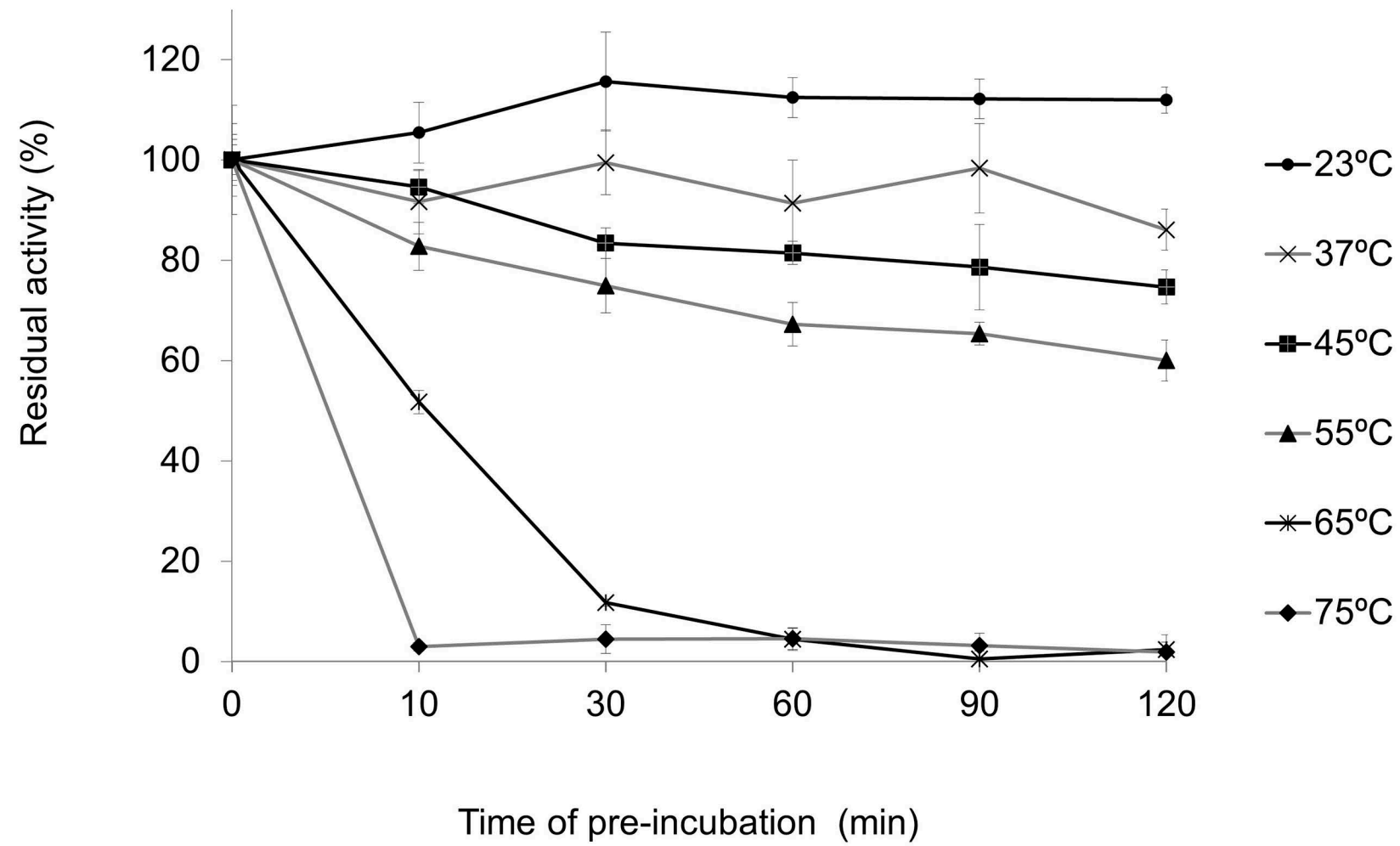
A

B

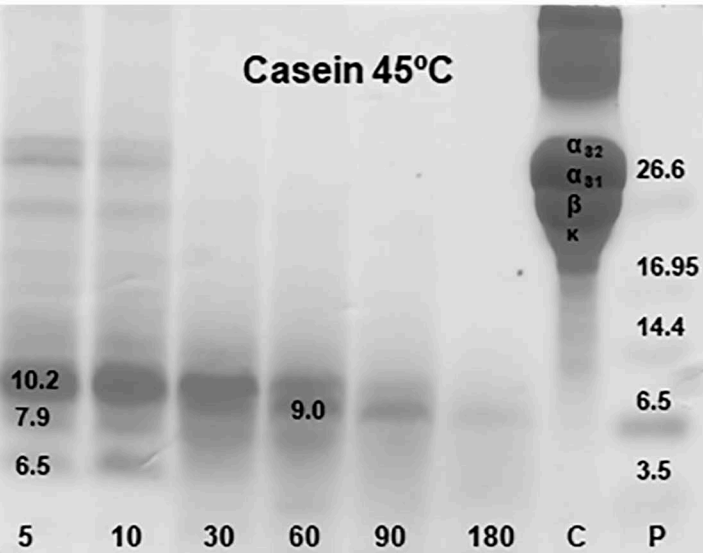


Residual activity (%)

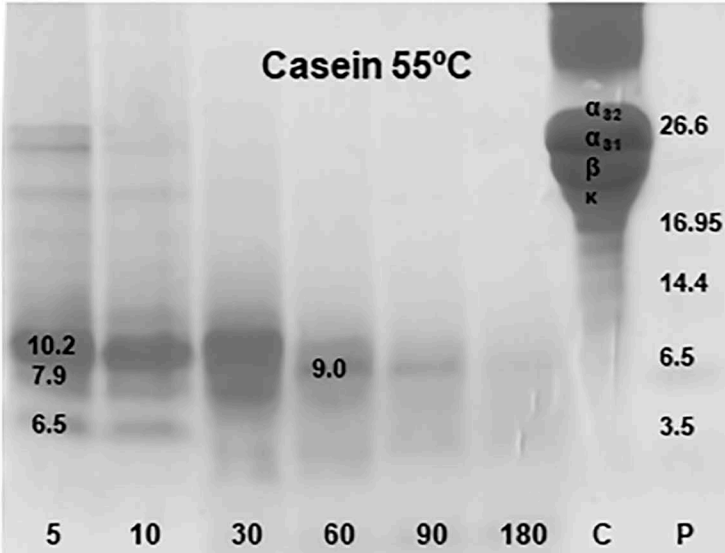




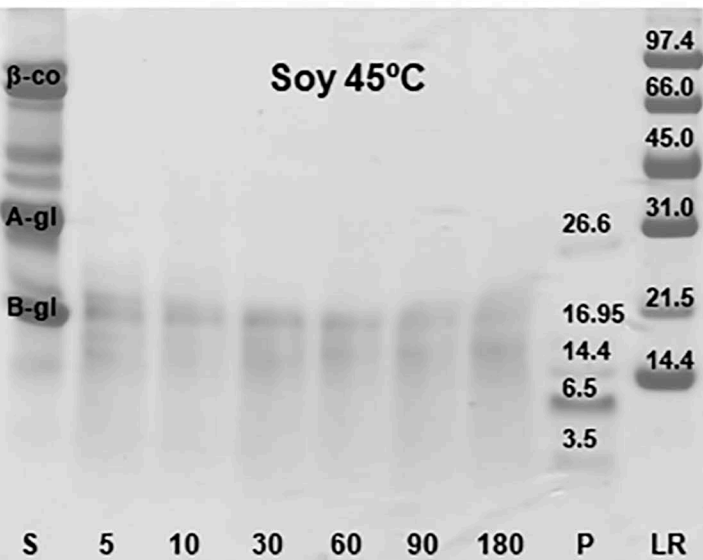
Casein 45°C



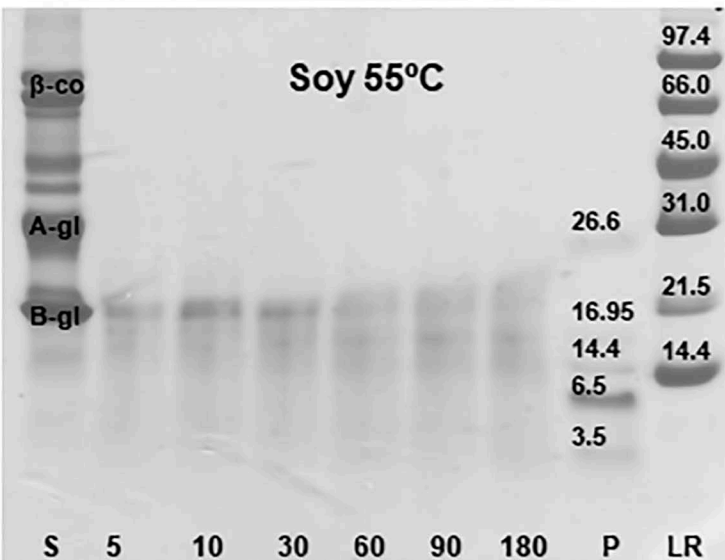
Casein 55°C



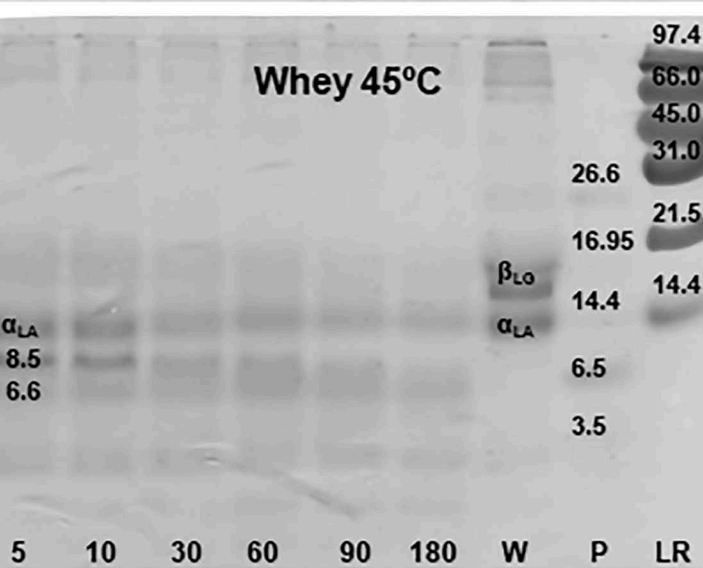
Soy 45°C



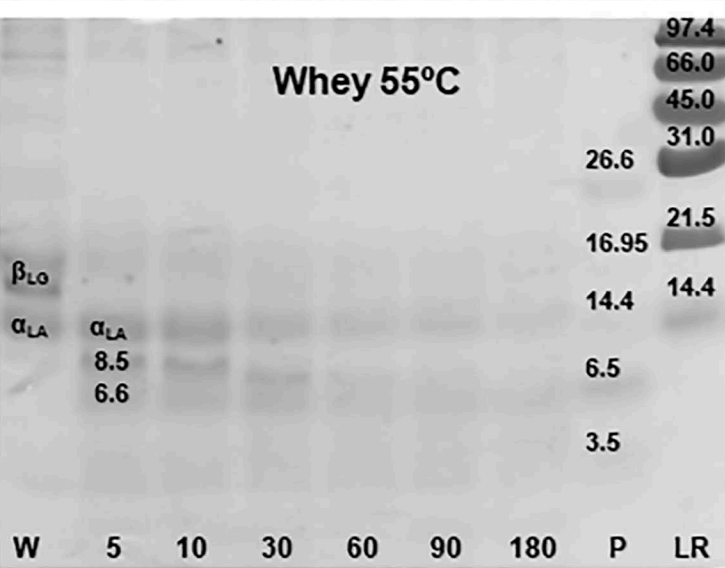
Soy 55°C

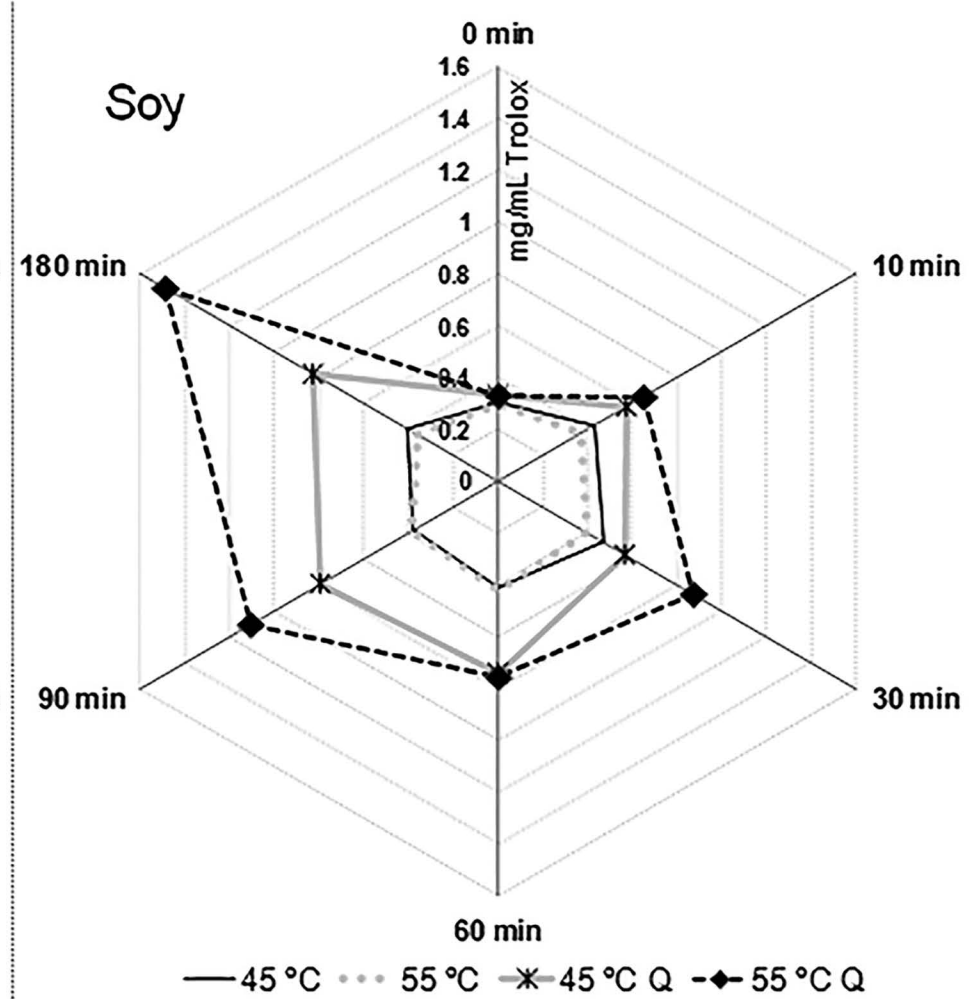
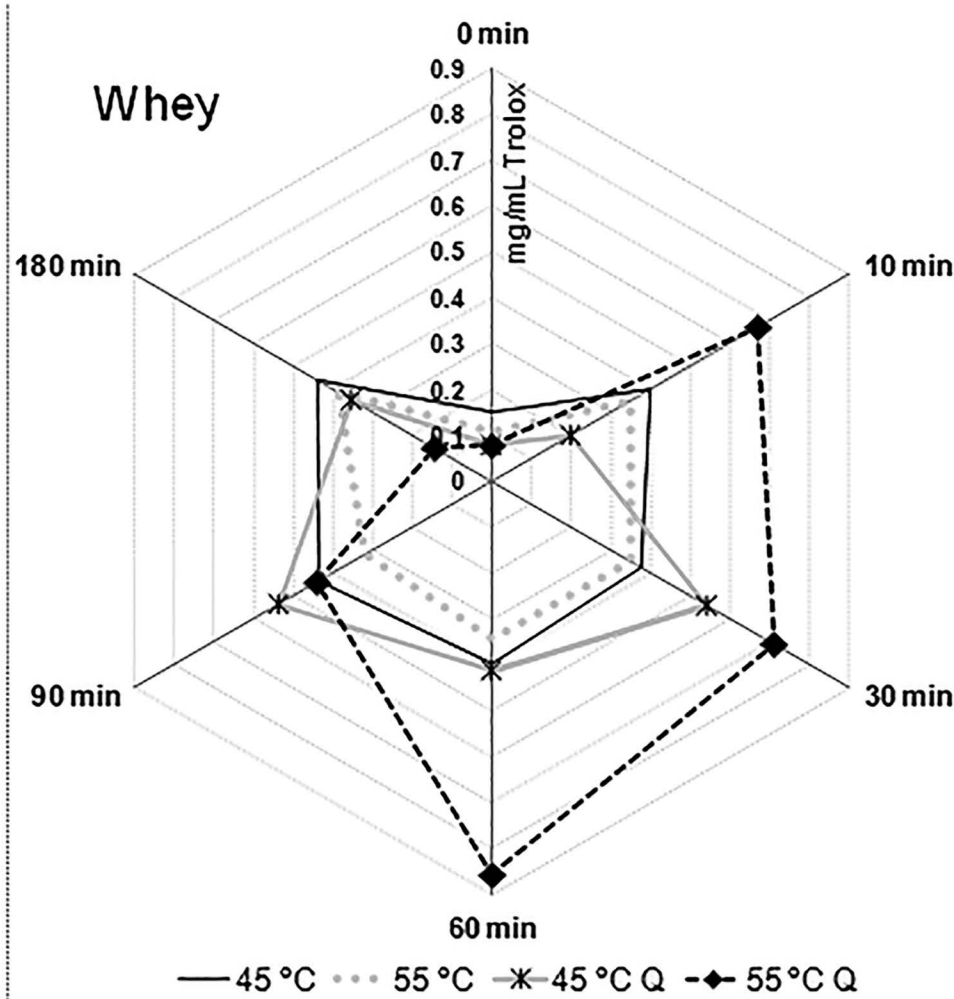
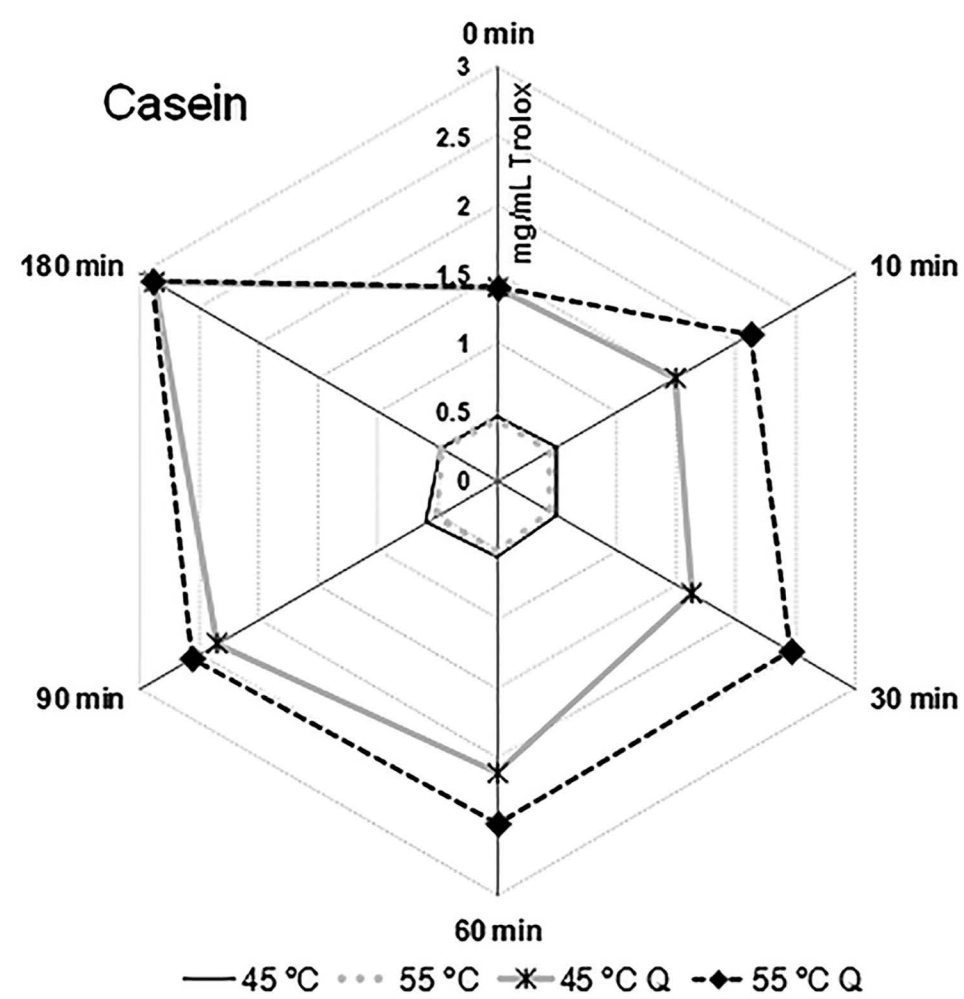


Whey 45°C

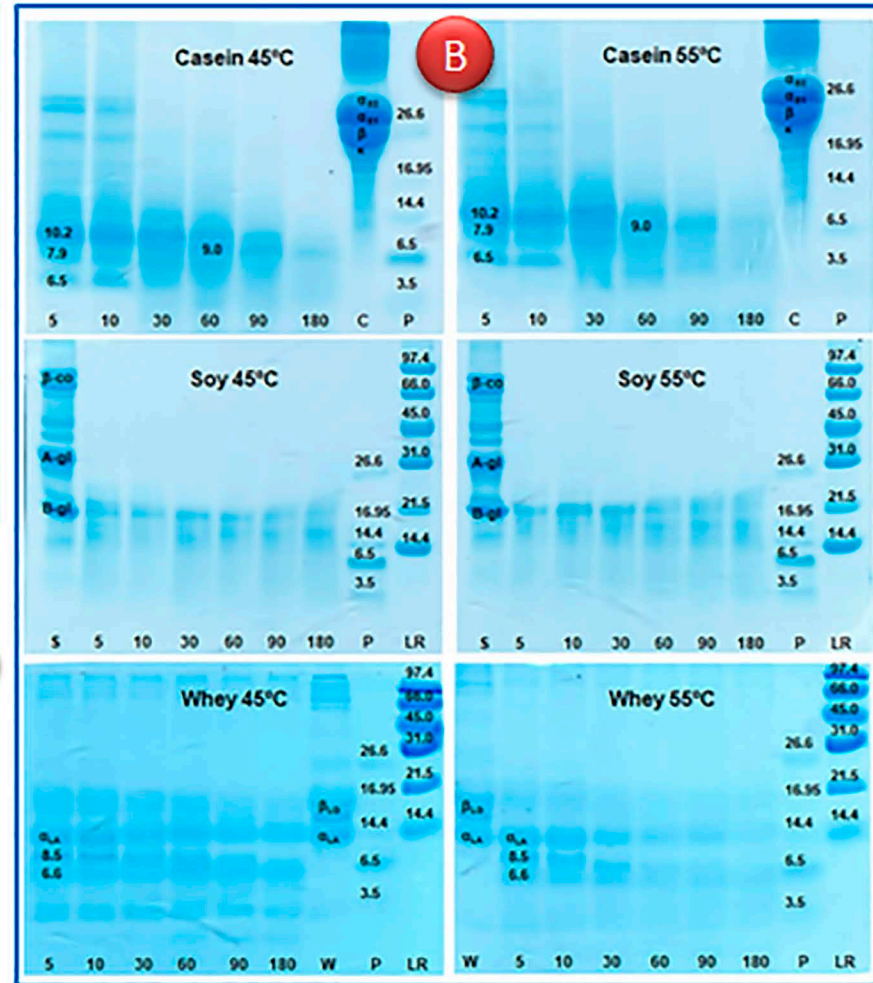
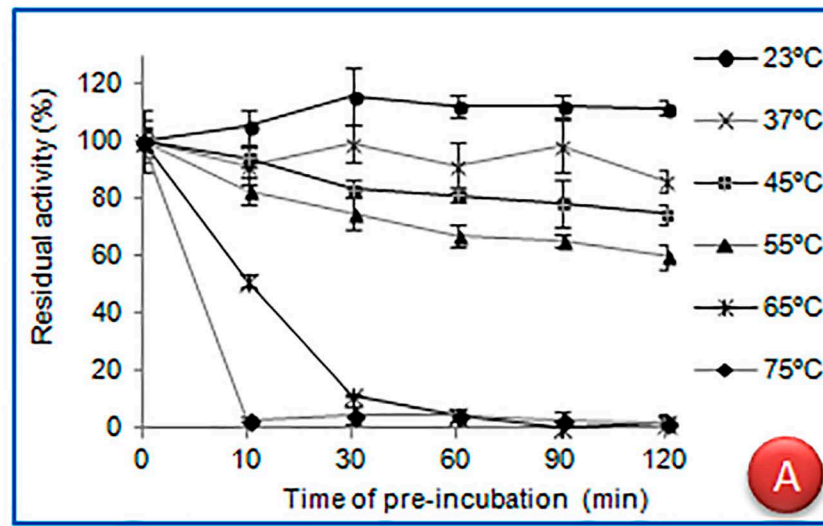


Whey 55°C





Fruits of *Bromelia serra* Griseb. (Bromeliaceae)



1. Crude extract characterization

- Cysteine peptidases
- 24.1–25.9 kDa
- High thermal stability at 120 min, $T^{\circ} \leq 45^{\circ}\text{C}$. Inactivation after 10 min at 75°C (Fig. A)
- Optimal pH range: 6.03–9.05

2. Food protein hydrolysates

Hydrolysis degree (55 °C, 180 min)
 soybean protein : $18.3 \pm 0.6\%$
 bovine casein: $29.1 \pm 0.7\%$
 bovine whey: $12.6 \pm 0.9\%$
Tricine SDS-PAGE (Fig. B)

3. Biological activities: maximum values after 180 min of hydrolysis at 55 °C

Antioxidant activity (ABTS, Fig. C): 2.89 ± 0.12 mg/mL Trolox, casein *ACE inhibition*: $91.9 \pm 1.2\%$, whey protein

