**PESQUISA**

Ciência, Tecnologia e Inovação

**FARMACOLOGIA**

**Principais resultados publicados pelo grupo:**


  **Fig 1.** after 7 days of daily morphine administration the animals did not demonstrate development of tolerance. The analgesic effect was observed until 90 min after morphine administration.

  **Fig 2.** effect of a second repeated morphine administration between P80 and P86 on nociceptive response. The analgesic effect was observed until 30 min after administration of morphine, but only the morphine/morphine group remained analgesic until 60 min.


  **Fig 1.** ATP, ADP, and AMP hydrolysis in synaptosomes from spinal cord and cerebral cortex at 16 days of age.

  **Fig 2.** E-NTPDase 1, 2, 3, and 5 nucleotidase mRNA transcript levels from spinal cord of male rats at 16 days of age.

- 24-Hour Temporal Pattern of NTPDase and 5'-Nucleotidase Enzymes in Rat Blood Serum. Chronobiology International, in press.

  **Fig 1.** the hydrolysis of ATP, ADP, and AMP were evaluated in blood serum during one 24 -h span at ZT 0, 6, 12, and 18.

  **Fig 2.** physiological levels of corticosterone and melatonin during 24 h in blood serum.


  **Fig 1.** Effects of indomethacin administration 30 min before the formalin test at P30 (A) and P60 (B) after repeated morphine administration in early life.

  **Fig 2.** Effects of ketamine administration 30 min before the formalin test at P30 and P60 after repeated morphine administration in early life.