

SEROTONIN RECEPTORS INVOLVEMENT IN RELAXANT PROPERTIES OF SACCHAROMYCES BOULARDII CNCM I-745. AN EX-VIVO MODEL RELEVANT TO IBS

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UEG Week Copenhagen 2023

Poster

Colorectal

October 15, 2023

Saccharomyces boulardii CNCM I-745 inhibits intestinal motility in rat ileum primarily through serotonin 5-HT_{1A} and 5-HT_{2A/2B/2C} receptor subtypes.

KEY POINTS

- In isolated rat ileum, *S. boulardii* at concentrations of 0.05-1.5 mg/mL shifted serotonin concentration-response curves rightward in a dose-dependent manner, with EC₅₀ values increasing from 0.074 μ M to 2.1 μ M at the highest concentration.
- *S. boulardii* inhibited contractions induced by 5-HT_{1A} agonist 5-carboxamidotryptamine and 5-HT_{2A/2B/2C} agonist α -methyl-5-HT, with 1.5 mg/mL increasing their EC₅₀ values from 0.15 μ M to 2.4 μ M and from 0.27 μ M to 1.3 μ M respectively.
- Serotonin-induced ileal contractions were inhibited by 5-HT_{1A}, 5-HT_{2A}, and 5-HT₄ antagonists but not by 5-HT_{2C}, 5-HT₃, or 5-HT₇ antagonists.
- The study used an ex vivo rat ileum model with isotonic force measurements to assess concentration-dependent contractile responses to serotonin and specific receptor agonists.
- The author disclosed employment by Biocodex, the manufacturer of *S. boulardii* CNCM I-745.

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