



## Formulation and Characterization of Rifabutin Loaded Floating Gellan Gum Beads

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**SUMMARY.** Rifabutin loaded floating gellan gum beads were prepared by Ca<sup>++</sup> induced ionotropic gelation in acidic medium by drop wise addition of gellan gum dispersion containing drug and gas-generating agent. The prepared beads were evaluated for *in vitro* characterization and *in vivo Helicobacter pylori* clearance efficiency following repeated oral administration to *H. pylori* infected albino rats. Live cell staining of stomach homogenates of *H. pylori* infected animals treated with rifabutin showed pronounced anti *H. pylori* activity. Our results suggested that the floating gellan gum beads may be used for a potential oral stomach-specific release system to treat stomach-specific infections like multi-drug resistant *H. pylori* infection.

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**KEY WORDS:** Floating beads, Gellan gum, *Helicobacter pylori*, Incorporation efficiency, Rifabutin.

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