

Investigating How Commensal Gut Bacteria and Their Products Promote Anti-Tumor Immunity

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Public-facing abstract

Not every cancer patient responds to immunotherapy, and one reason may live in the gut. This project studies *Erysipelatoclostridium ramosum*, a commensal bacterium that helped overcome microbiome-linked resistance to immunotherapy in mice. The team found that bacterial pellets, rather than supernatants, boosted CD8 T cell proliferation and killing activity, with evidence pointing to NF- κ B signaling. The takeaway is hopeful and concrete: specific microbes or microbial products may someday be tuned into therapies that help more patients mount strong anti-tumor immune responses.