



Caspase-9 driven murine model of selective cell apoptosis and efferocytosis

TECHNOLOGY NUMBER: 2023-247



Technology ID

2023-247

Category

Research Tools and Reagents

Further information

Emily Bowers

bowersea@umich.edu

Learn more



INNOVATION

With the idea to create a universal transgenic mouse with the potential to induce apoptosis in cells expressing Cre-recombinase controlled by a specific promoter, we generated the inducible Caspase9 (iCasp9) mouse model where the expression of iCasp9 and GFP labelling of these cells is encoded by a transgenic fragment CAGpromoter-Lox-STOP-Lox-iCaspase9-T2A-eGFP. Using this model, apoptosis can be controlled at different levels by regulating the administration regimen of a dimerizer compound (AP20187) that triggers iCasp9 dimerization and apoptosis. This model provides the possibility to study apoptotic cell clearance in a wide variety of cells where Cre drivers define the target cell.