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# OPEN ACCESS

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**Protocol status:** In development

We are still developing and optimizing this protocol.

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Gavage

## (3) ABT263 (Navitoclax) Treatment in Mice

Andrew Peter Davis<sup>1,2</sup>, Adams<sup>1,2</sup>

<sup>1</sup>Sanford Burnham Prebys Medical Discovery Institute; <sup>2</sup>Adams Lab

Peter Adams: PI of Adams Lab and NIH grant awardee;



#### **Andrew Davis**

Sanford Burnham Prebys Medical Discovery Institute, Peter Ad...

#### **ABSTRACT**

This protocol is for treating mice with the senolytic, Navitoclax, by oral gavage.

#### **MATERIALS**

ABT263 (Navitoclax) from SelleckChem (cat no S1001)

Phosal 50PG from Fisher Scientific (cat no 502029444)

PEG400 from Fisher Scientific (cat no 502029444)

Ethanol 200 proof from VWR (cat no 71006-012 (EA))

Feeding Needle for Oral Gavage 20G x 38mm (2mm Tip) Curved from Pet Surgical (cat no DAFN2038C)

Vehicle is made as a solution of 60% Phosal 50PG, 30% PEG400, 10% Ethanol by volume. Phosal 50PG and PEG400 are very viscous and so may require extra time, heat, and/or positive displacement pipets to effectively move and mix. Dissolution of ABT263 in the vehicle requires heat (50-60°C ideally with shaking) and can be aided by sonication. Drug can be dissolved in the vehicle at 12.5mg/ml (100mg in 8ml vehicle). We did not test other concentrations.

#### SAFETY WARNINGS



Always use recommended PPE from your institutional safety department (lab coat, gloves, eye protection, masks, etc.). This can also help to prevent contamination of your samples.

#### ETHICS STATEMENT

All experiments using mice should be first approved by the appropriate oversight organization of your locale.

### **BEFORE START INSTRUCTIONS**

ABT263 must first be dissolved in the vehicle by heating to 60°C. Sonication can be used to dissolve faster. See the materials section for specifics.

1	Give mice Navitoclax or Vehicle by oral gavage at 50mg/kg/day. Mice receive vehicle or drug for a total of 14 days, spread across 6 weeks, as outlined in the sub-steps below.
1.1	Mice receive seven days of once-daily oral gavage of drug or vehicle
1.2	Then fourteen days with no treatment
1.3	Then seven more days of once-daily oral gavage of drug or vehicle
1.4	Then fourteen days with no treatment
1.5	Harvest tissues after the last day of no treatment