



# POWERED RESEARCH

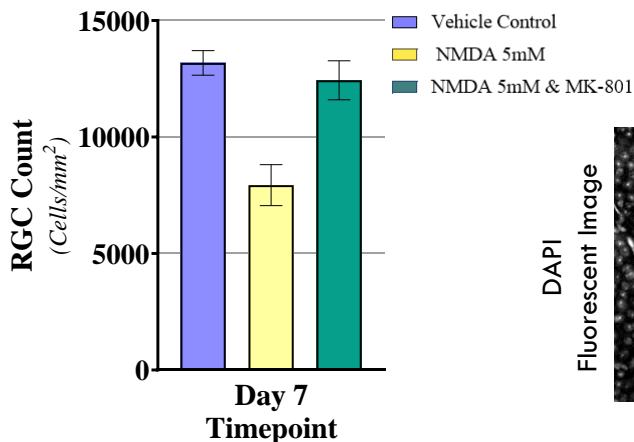
## N-methyl-D-aspartate (NMDA) Excitotoxicity Model in Mouse

The NMDA Excitotoxicity Model was designed to assess the efficacy of neuroprotective agents for the treatment of glaucoma. Test articles are evaluated for their ability to prevent or mitigate retinal degeneration and retinal ganglion cell (RGC) death.

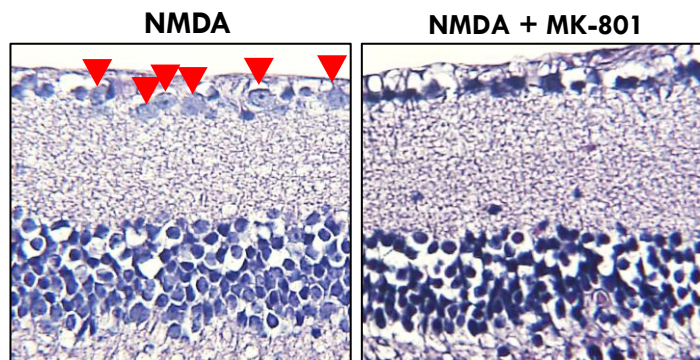
### Model Highlights:

- ✓ Pharmacokinetically relevant
- ✓ Rapid and robust readouts
- ✓ Retina flat mount analysis is a quantitative endpoint for RGC loss
- ✓ OCT measurement and ERG analysis are primary in-life endpoints to measure functional neuroprotection

### Retinal Ganglion Cell Count from Flat Mount Analysis

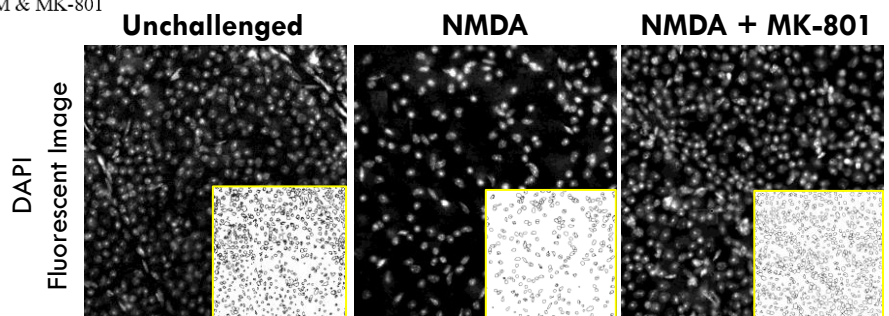


### Histopathology



▼ Retinal ganglion cell swelling

### Flat Mount RGC Count Analysis



Insets show segmented nuclei outlines from ImageJ quantification

Endpoints can include (but are not limited to): slit lamp biomicroscopy and indirect ophthalmoscopy, optical coherence tomography, electroretinography, and histopathology.

*And many other offerings tailored to your needs...*

### Our Team

Studies are led by our specialized team with decades of experience-

Dr. David Culp, Senior Vice President, and Dr. Brian Gilger, Board-Certified Veterinary Ophthalmologist

### Contact Us

Email: [info@poweredresearch.com](mailto:info@poweredresearch.com) | Web: [www.poweredresearch.com](http://www.poweredresearch.com)

