

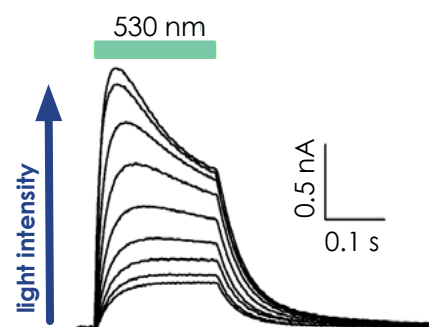


# Optogenetic Stimulation Tool SyncroPatch 384

## Light up your experiments

- Ideal for light activation of ion channels
- Activation and deactivation of caged or photoswitchable compounds
- Add-on for the SyncroPatch 384
- Activate using light in 96 wells simultaneously
- Choose from 10 different wavelengths

### Light activation of channelrhodopsin



Activation of ChR by increasing light intensity, adapted from [Govorunova et al, 2022](#).













Contact us today

# Optogenetic Stimulation Tool

## Activate ion channels using light

### Choose from 10 different wavelengths

- Simply exchange the LEDs to activate with a different wavelength.
- Couple voltage protocols and light activation.
- Choose from a list of 10 different wavelengths to find the right one for your experiments:

Light type	Dominant or Peak wavelength (nm)	
	Minimum	Maximum
 UV*	380	390
 Visible	-	-
 Royal Blue	440	460
 Blue	460	480
 Cyan	490	510
 Green	520	540
 Amber	588	592
 Red-Orange	610	620
 Red	620	645
 Deep Red	650	670

\*Other wavelengths for UV LEDs available, please ask us for details.

### Stimulate 96 wells simultaneously

- One module used to stimulate 96 wells simultaneously.
- Module designed to fit on top of the SyncroPatch 384 measurehead.
- Easy to remove for experiments not requiring light stimulation.



### Two modes of operation

- **Stimulation Gated:** Starts a previously defined light pulse for any step of the voltage/current clamp protocol.
- **Stimulation Feed Through:** LEDs switch on at every defined step.

