

R-GECO calcium sensor
Product Number: #U0600R

Materials included

- R-GECO sensor BacMam ~ 1×10^{10} VG/mL in TNM-FH Insect Culture Medium.
Store Baculovirus stock at 4°C, protected from light. For long-term storage (more than 6 months), store aliquots of the virus at -80°C. Avoid repeated freeze/thaw cycles.
- Sodium Butyrate (Sigma Aldrich product number B5887) 500 mM in H₂O..
Sodium Butyrate is added to the culture to maintain BacMam expression. Other HDAC inhibitors may work as well. Stocks should be stored at 4°C.
- M1 muscarinic acetylcholine receptor BacMam with nuclear green label in TNM-FH Insect Culture Medium.
M1 receptor is included as a positive control. This virus can be mixed with the R-GECO sensor virus so that cells express both M1 receptor and the R-GECO sensor.
Store Baculovirus stock at 4°C, protected from light. For long-term storage (more than 6 months), store aliquots of the virus at -80°C. Avoid freeze/thaw cycles.
- Carbachol 25 mM in H₂O
Carbachol addition can be used to stimulate G_q signaling through the M1 receptor included in this kit. Store at -20 °C.

Biosafety

BacMam is the modified baculovirus, *Autographa californica*, AcMNPV. The Baculovirus contained in this kit is pseudotyped to infect mammalian cells, but it cannot replicate in the cells and its genome is silent. While it should be handled carefully, in a sterile environment, it is classified as a BSL 1 reagent.

This product is for research use only and is not recommended for use or sale in human or animal diagnostic or therapeutic products.

Materials are provided without warranty, express or implied. End user is responsible for making sure product use complies with applicable regulations. No right to resell products or any components of these products is conveyed. Reverse engineering or modification is not permitted.

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Detailed protocols

Protocols are available on the Montana Molecular Website:

<http://montanamolecular.com/protocols/red-geco-ca2-protocol/>