

SAFETY DATA SHEET

Relevant Products

#D1000G β -arrestin Vasopressin (V2R)
#D1020G β -arrestin GLP-1R

#D1010G β -arrestin Angiotensin II (AT1R)
#D1030G β -arrestin Mu Opioid II (OPRM1)

#D1040G β -arrestin β 2 adrenergic (B2AR)

Materials included

- Fluorescent β -arrestin sensor BacMam $\sim 2 \times 10^{10}$ VG/mL in ESF 921 Insect Cell Culture Medium (Expression Systems #96-001-01).
- GPCR in BacMam $\sim 4 \times 10^{10}$ VG/mL in ESF 921 Insect Cell Culture Medium (Expression Systems #96-001-01).
 - GPCR varies with the kit, D1000G includes Vasopressin V2R for example.
- GRK in BacMam $\sim 2 \times 10^{10}$ VG/mL in ESF 921 Insect Cell Culture Medium (Expression Systems #96-001-01).
 - D1000G and D1010G do not require addition of a GRK.
- Control Agonist (varies with kit). See manufacturer's guidelines for use.
 - D1000G: Argipressin (Arginine Vasopressin, AVP) 800 μ M, in H₂O, Cayman Chemical, #24154
 - D1010G: Angiotensin II (Ang II) 5mM, in H₂O, Cayman Chemical, #17150
 - D1020G: Exendin-4 500 μ M, in DPBS, Cayman Chemical, #11096
 - D1030G: DAMGO 10mM, in EtOH, Cayman Chemical, #21553
 - D1040G: Isoproterenol 10mM in HCl, Sigma Aldrich, #12760
- Sodium Butyrate (Sigma Aldrich product # B5887) 500 mM in H₂O.

Storage

BacMam vectors should be stored at 4°C and protected from light in the original package. Avoid repeated freeze/thaw cycles. Store HDAC inhibitor at 4°C

Add sodium butyrate to cultured cells to maintain BacMam expression as needed. Other HDAC inhibitors may work as well or even better in certain cell types. For expression in CHO cells, we recommend valproic acid instead of sodium butyrate. Many cell types maintain expression without an HDAC inhibitor.

QA/QC

BacMam stocks are tested for sterility. Samples are added to rich cell culture media without antibiotic and incubated at 37°C, 5% CO₂, and checked for bacterial or fungal growth after 5 days. Viral genes (VG) per milliliter (mL) are measured by qPCR with primers specific to VSVG. Check tube label for exact titer value. Viral genomic DNA at multiple dilutions are run in qPCR against a standard curve to generate an average titer for each BacMam stock. Each tube of stock is labeled with VG/mL and a stock keeping unit (SKU) identifier. To test efficacy, serial dilutions are added to cultured HEK 293 cells. After 24 hours, fluorescent cells are counted to establish transducing units per mL of stock.

Biosafety

BacMam is the modified baculovirus, *Autographa californica*, AcMNPV. Baculovirus is pseudotyped to infect mammalian cells, but it cannot replicate in the cells and its genome is silent in mammalian cells. While it should be handled carefully, in a sterile environment, it is classified as a BSL 1 reagent. The NIH Guidelines for Research on Recombinant DNA Molecules should be consulted for laboratory safety procedures. Shipment contains sodium butyrate which may cause eye, skin irritation or respiratory irritation.

For Research Use Only. Not recommended for use or sale in human or animal diagnostic or therapeutic products. This product contains no substances which at their given concentration are considered to be hazardous to health, however we recommend handling with care. Wear impervious gloves and eye protection when handling. Do not inject.

Review the protocols on Montana Molecular's Website: www.montanamolecular.com before using these 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 any components of these products is conveyed. Reverse engineering or modification of these products is not permitted. MADE IN THE USA