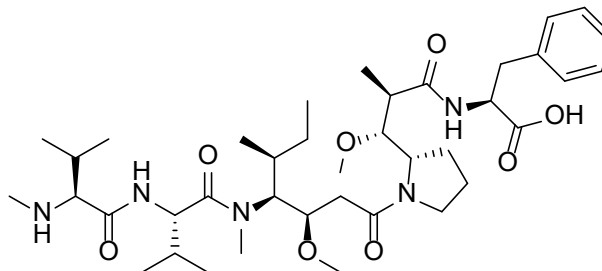


MMAF (Monomethyl Auristatin F) Control Set for *in Vitro* Studies

Product Number: **CM11032.1**

Contents: 6 tubes, each with 100 µL of
10 µM MMAF solution in DMSO.



Product Description

CellMosaic's monomethyl auristatin F (MMAF) Control Set is a ready-to-use solution for *in vitro* research, formulated to simplify your workflow and minimize handling risks of this potent cytotoxic agent. MMAF is a highly potent antimitotic compound that binds to tubulin, inhibiting microtubule assembly and thereby blocking cell division. This control set contains 6 tubes of a 10 µM MMAF solution in DMSO, a concentration suitable for most biological research and cell-based assays.

The 10 µM concentration is intentionally set within a safe, research-appropriate range for analytical studies, both quantitative and qualitative. Each tube is intended for a single experiment, enabling straightforward dilution (see **Table 1** for suggested dilutions). The MMAF solution is pre-formulated and stable at room temperature, requiring no preparation before use or dilution.

Drug Information

- **Name:** Monomethyl auristatin F (MMAF)
- **CAS Number:** 745017-94-1
- **Molecular Weight:** 731.96 Da
- **Chemical Formula:** C₃₉H₆₅N₅O₈
- **Mechanism of Action:** Inhibits cell division by blocking the polymerization of tubulin
- **Reported Activities:** Anticancer, antimitotic; also reported to have antioxidant, anti-inflammatory, and insecticidal properties.

Key Features

- Pre-formulated **10 µM stock in DMSO** —no preparation needed.
- Convenient format: 6 single-use tubes for consistent results.
- Ideal for:
 - Drug screening
 - Cell-viability, proliferation and cytotoxicity assays
 - Other qualitative and quantitative studies
- Sufficient volume for replicates.

Storage & Stability

- Once diluted: stable at room temperature for short-term use.
- Long-term storage: Store at -20 °C or below.

Procedure

1. Remove one tube from the set and allow it to warm to ambient temperature.
2. Briefly centrifuge to ensure all liquid is at the bottom of the tube.
3. Use directly or dilute to the desired concentration.

Serial Dilution Guidelines

To prepare concentrations from 1 μ M to 10 pM:

- Use clean and labeled vials to avoid cross-contamination.
- Dilute the MMAF stock using an appropriate solvent or buffer (e.g., PBS buffer or water)
- Approximate total diluent volume needed: 6 mL.

Table 1: An Example of Serial Dilution Plan for MMAF Control Set



Step	MMAF Concentration	Volume to Transfer (μ L)	Diluent Volume (μ L)	Total Volume (μ L)	Sample Volume for Assay (μ L)
Stock	10 μ M	–	–	100	–
1	1 μ M	100	900	1000	600
2	500 nM	400	400	800	600
3	100 nM	200	800	1000	600
4	10 nM	100	900	1000	600
5	5 nM	400	400	800	600
6	1 nM	200	800	1000	600
7	100 pM	100	900	1000	600
8	50 pM	400	400	800	600
9	10 pM	200	800	1000	800

Note: Handle MMAF-containing solutions with appropriate safety precautions, including PPE and fume hood use. Dispose of waste according to institutional hazardous waste guidelines.

Important Notes & Contact Information

READ BEFORE USING ANY RESOURCES PROVIDED HEREIN

The information provided in this document and the methods included in this package are for information purposes only. CellMosaic provides no warranty of performance or suitability for the purpose described herein.

Sample data are provided for illustrative and example purposes only and represent a small dataset used to verify kit performance in the CellMosaic laboratory. Information about the chemicals and reagents used in the kit are provided as necessary.

For Research Use Only. Not for Use in Diagnostic Procedures.

The information in this document is subject to change without notice. CellMosaic assumes no responsibility for any errors or omissions in this document. In no event shall CellMosaic be liable for any damages, whether direct, indirect, incidental, special, consequential, punitive, or otherwise, arising out of or in connection with the use of this document or the products described herein, regardless of the form of action and even if CellMosaic has been advised of the possibility of such damages. Users are responsible for determining the suitability of CellMosaic's products for their intended applications and for ensuring compliance with all applicable laws and regulations.

NOTICE TO PURCHASER: LIMITED LICENSE

The purchase of this product includes a limited, non-transferable license to use the product solely for the purchaser's internal research purposes. This license is personal to the original purchaser and may not be assigned, transferred, or sublicensed to any third party outside the purchaser's organization without prior written consent from CellMosaic. No other rights or licenses are granted or implied under any CellMosaic intellectual property, whether by implication, estoppel, or otherwise, including rights to modify, resell, or repackage this product. For additional information regarding licensing or use restrictions, please contact:

Director of Licensing
c/o CellMosaic, Inc.
10-A Roessler Road, Woburn, MA 01801.
Phone: 781-463-0002
Fax: 781-998-4694
E-mail: info@cellmosaic.com