proTAME  
Cat. # I-440

proTAME is a cell-permeable prodrug capable of inducing mitotic arrest and cell death in HeLa and other cell types. proTAME is converted to its active parent molecule (TAME, tosyl-L-arginine methyl ester) by intracellular esterases. TAME inhibits the ubiquitin ligase activity of the anaphase-promoting complex/cyclosome (APC/C) by preventing its activation by Cdc20 and Cdh1.

### Product Information

| Quantity | 1 mg |
| Formula | C₃₄H₃₈N₄O₁₂S |
| FW | 726.75 |

**Structure:**

![proTAME Structure](image)

### Physical/Chemical Characteristics

| Solubility | Provided as a 20 mM stock solution in DMSO |
| Purity | > 90% |

### Use & Storage

**Use:**
When diluting proTAME into the cell growth medium, it is best to add the DMSO stock solution to an empty tube first, and then add a large volume of growth medium followed by immediate mixing. proTAME is sparingly soluble in aqueous solutions. To avoid precipitation, instant and highly effective mixing is necessary. Optimal dose for each cell line needs to be established empirically due to cell-line specific differences in prodrug activation. HeLa and hTERT-RPE1 cells activate the prodrug efficiently, with mitotic arrest observed at 12 µM compound. MCF10a cells activate the prodrug much less efficiently.

**Storage:**
Store stock solution at -20°C. Avoid multiple freeze/thaw cycles.
**Literature**

**References:**

*For Laboratory Research Use Only, Not For Use in Humans*

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