

## Thallos Gold AM



Membrane Permeable, Gold Fluorescent Thallium (Tl<sup>+</sup>) Indicator. Red-shifted excitation and emission enable multiplexing with GFP-expressing cells or other green fluorescent indicators. Works with potassium (K<sup>+</sup>), sodium (Na<sup>+</sup>), and monovalent cation channels, transporters, and GPCRs.

Available in these sizes:

|       |            |
|-------|------------|
| 1391C | 500 µg x 1 |
| 1391F | 50 µg x 10 |
| 1391G | 50 µg x 3  |

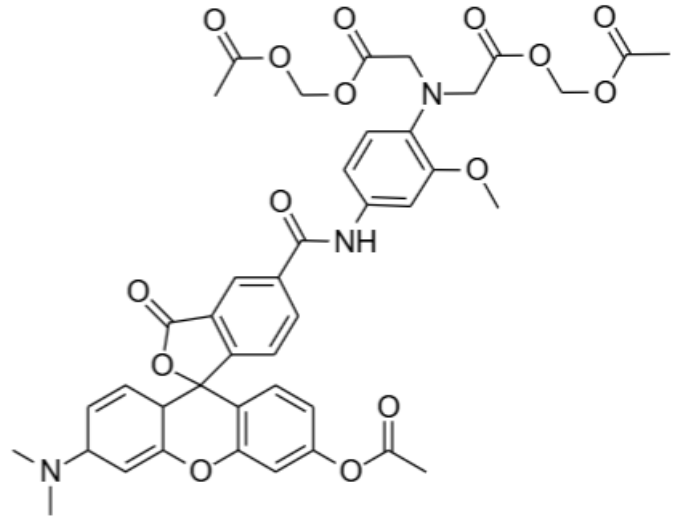
| Description      |                                     |
|------------------|-------------------------------------|
| CAS number       | N/A                                 |
| PubChem CID      | N/A                                 |
| Molecular Weight | 825 g/mol                           |
| Solubility       | DMSO                                |
| Storage          | -20°C                               |
| Appearance       | Light red to brown film or pellet   |
| Container        | 1.5 mL polypropylene cryogenic vial |

| Absorbance Spectrum | Agilent Cary 60 UV-VIS Spectrophotometer  |
|---------------------|---|
| Solvent*            | High Potassium (K <sup>+</sup> ) Buffer Solution, with 1.5 mM Tl <sub>2</sub> SO <sub>4</sub> added |
| Absorbance max      | 522 ± 3 nm  |

| Fluorescence Spectrum | Horiba Jobin Yvon FluoroMax Plus Spectrofluorometer   |
|-----------------------|---|
| Solvent*              | High Potassium (K <sup>+</sup> ) Buffer Solution, with 1.5 mM Tl <sub>2</sub> SO <sub>4</sub> added |
| Excitation max        | 522 ± 3 nm  |
| Emission max          | 556 ± 3 nm  |

\*Note: AM Esters are hydrolyzed to the ion sensing form

Also check out our [Brilliant Thallium Assay Kit \(Cat# 11020\)](#) which contains Thallos Gold AM and all the reagents needed to perform thallium flux assays in a convenient all-in-one kit. Available in sizes with enough materials for 2 or 10 plates.



|                             |  |
|-----------------------------|--|
| LCMS                        | Agilent 1220 Infinity II   |
| Column                      | Phenomenex 00D-4251-E0 Luna C <sub>18</sub> , 4.6 x 100 mm, 100Å, 3 µm     |
| UV-Vis Diode Array Detector | 254 nm   |
| Purity                      | ≥ 95%  |
| Single Quad MS Detector     | ESI positive   |
| Molecular Ion               | 826.2 ± 0.5 m/z [M+H] <sup>+</sup><br>413.6 ± 0.5 m/z [M+2H] <sup>2+</sup> |

|                             |                               |
|-----------------------------|-------------------------------|
| <sup>1</sup> H NMR Spectrum | Bruker Avance 400             |
| Solvent                     | CDCl <sub>3</sub>             |
| Spectra                     | Product conforms to structure |

|   |  |
|---|--|
| Cell Assay  | BioTek Cytation 5 Cell Imaging Multi-mode Reader                               |
| F/F <sub>0</sub> post stimulus in relevant biological | To Pass Test   |
| Imaging Analysis                                      | Observed fluorescence is intracellular with minimal extracellular fluorescence |