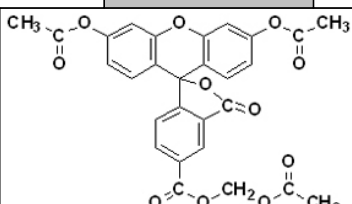


## Certificate of Analysis

(C of A)

|                                 |                                                                                     |                                                        |                                              |                                                 |             |
|---------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------|----------------------------------------------|-------------------------------------------------|-------------|
| Name:                           |                                                                                     | 5-CFDA, AM<br>5-Carboxyfluorescein diacetate, AM ester |                                              |                                                 |             |
| Catalog Number:                 | 6929                                                                                | Lot:                                                   |                                              | 51863                                           |             |
| CAS Number:                     | 124412-00-6                                                                         | Formula:                                               |                                              | C <sub>28</sub> H <sub>20</sub> O <sub>11</sub> |             |
| Molecular Weight:               | 532.45 (g/mol)                                                                      |                                                        |                                              |                                                 |             |
|                                 |                                                                                     |                                                        |                                              |                                                 |             |
|                                 | Observed                                                                            |                                                        | Standard                                     |                                                 |             |
| HPLC Purity:                    | 99% at 254 nm                                                                       |                                                        | ≥ 90% at 254 nm                              |                                                 |             |
| Absorption (Methanol)           |                                                                                     |                                                        |                                              |                                                 |             |
| Wavelength (λ <sub>max</sub> ): | 291 nm                                                                              |                                                        | 290 ± 3 nm                                   |                                                 |             |
| Extinction:                     | 5,700 cm <sup>-1</sup> M <sup>-1</sup>                                              |                                                        | 6,000 ± 600 cm <sup>-1</sup> M <sup>-1</sup> |                                                 |             |
| TLC Purity:                     | > 99%                                                                               |                                                        | ≥ 90%                                        |                                                 |             |
| TLC System:                     | 1:1 Hexane / Ethyl acetate                                                          |                                                        |                                              |                                                 |             |
| Storage:                        | Freeze: Store at -5 to -30°C (F), Protect from moisture (D), Protect from light (L) |                                                        |                                              |                                                 |             |
| Production Lot:                 | 16153                                                                               | Release:                                               | 28-May-2019                                  | Expiration:                                     | 28-May-2029 |
| Structure:                      |  |                                                        |                                              |                                                 |             |

This data reflects the accuracy of the analysis of the subject lot  
 For research use only. Not for human use. No animal source.  
 This material is chemically synthesized and manufactured in the USA

**Approved by:** Dianna M Wineinger  
 Analytical Services Manager

**Date:** 28-May-2019

**Signature:** Dianna M Wineinger