

# CERTIFICATE OF ANALYSIS

## Product Identification

<b>Product Name</b>	TAMRA Sulfo NHS ester
<b>Catalog Number</b>	KWSN1025
<b>Appearance</b>	Red Solid
<b>Storage Conditions</b>	Protect from Light at -20 °C
<b>Lot Number</b>	ATF00009
<b>Molecular Weight</b>	610 g/mol
<b>Soluble in</b>	DMF

## Product Analysis

<b>Absorption * - Maximum</b>	Lot Data	557 nm
	Specification	554 ± 3 nm
<b>Emission * - Maximum</b>	Lot Data	583 nm
	Specification	583 ± 4 nm
<b>Extinction Coefficient * at 554 nm</b>	Lot Data	67,000 /cm·M
	Specification	≥ 60,000 /cm·M
<b>LC/MS - Identity</b>	Lot Data	meets specification
	Specification	consistent with mass/fragmentation

\* Analytical Solvent : Methanol



Date of Issue : 13 Mar 2019

**\*\*For Research Use Only\*\***

BioActs certifies on the date above that is an accurate record of the analysis of the subject lot, and that the data conform to all quality specifications.