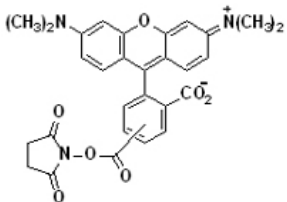


Certificate of Analysis (C of A)			
Name:	5(6)-TAMRA, SE 5(6)-Carboxytetramethylrhodamine, succinimidyl ester [NHS-Rhodamine]		
Catalog Number:	6267	Lot:	50261
CAS Number:	246256-50-8	Formula:	C <sub>29</sub> H <sub>25</sub> N <sub>3</sub> O <sub>7</sub>
Molecular Weight:	527.53 (g/mol)		
	<b>Observed</b>	<b>Standard</b>	
HPLC Purity:	91% at 254 nm	≥ 90% at 254 nm	
<b>Absorption (Methanol)</b>			
Wavelength (λ <sub>max</sub> ):	546 nm	547 ± 3 nm	
Extinction:	92,000 cm <sup>-1</sup> M <sup>-1</sup>	92,000 ± 8,000 cm <sup>-1</sup> M <sup>-1</sup>	
<b>Fluorescence (Methanol)</b>			
Emission Max:	574 nm	576 ± 4 nm	
TLC Purity:	> 97%	≥ 90%	
TLC System:	80:20 Chloroform / Methanol		
Storage:	Freeze: Store at -5 to -30°C (F), Protect from moisture (D), Protect from light (L)		
Production Lot:	14689	Release:	08-Jan-2020
		Expiration:	30-Dec-2019
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:** 08-Jan-2020

**Signature:** Dianna M. Wineinger