

Certificate of Analysis					
Name:	5-AminoTAMRA *Single Isomer* 5-Aminotetramethylrhodamine				
Catalog Number:	6239	Lot: 51080			
CAS Number:	167095-10-5	Formula: C <sub>24</sub> H <sub>23</sub> N <sub>3</sub> O <sub>3</sub>		$N_3O_3$	
Molecular Weight:	401.46 (g/mol)				
	Observed	Standard			
HPLC Purity:	92% at 254 nm	≥ 90% at 254 nm			
Absorption (0.2M HCI/MeOH)					
Wavelength (λ <sub>max</sub> ):	553 nm	!	553 ± 3 nm		
Extinction:	88,500 cm <sup>-1</sup> M <sup>-1</sup>	(	90,000 ± 5	,000 cm <sup>-</sup>	<sup>1</sup> M <sup>-1</sup>
Fluorescence (0.2M HCI/MeOH)					
Fluorescence (0.2M h	HCI/MeOH)				
Fluorescence (0.2M F Emission Max:	HCI/MeOH) 580 nm		580 ± 4 nm	1	
` `	, 		580 ± 4 nm ≥ 90%	1	
Emission Max:	580 nm > 99%	2	≥ 90%		
Emission Max:	580 nm > 99%	lethanol / Amr	≥ 90%		
Emission Max:  TLC Purity:  TLC System:	580 nm > 99% 85:13:2 Chloroform / M	lethanol / Amr	≥ 90% nonium Hy >97%	/droxide	(D), Protect
Emission Max:  TLC Purity:  TLC System:  Ismoer Purity	> 99%  85:13:2 Chloroform / Number ratio 99:1  Refrigerate: Store at 4-from light (L)	lethanol / Amr	≥ 90% monium Hy >97% otect from i	/droxide	(D), Protect 19-Nov-2025

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 **Date:** 19-Nov-2015

**Analytical Services Manager** 

Signature: Wanna M Wineinger