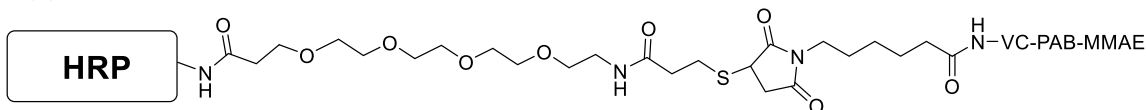


Certificate of Analysis

Description of the Material:

- (a) Chemical Name: HRP-MMAE (1:1) Conjugate with VC-PAB and dPEG4 linker (Single MMAE labeled conjugate)
- (b) Chemical Structure:



- (c) Molecular Weight: 44 KDa
- (d) Appearance: colorless to white lyophilized powder in a 1.5 mL centrifuge tube
- (e) Amount: each tube contains 0.5 mg of HRP-MMAE (1:1)
- (f) Reconstitution: dissolve in 153 μ L of deionized water to achieve 3.27 mg/mL in 1xPBS buffer containing sugar-based stabilizer (no preservative)

SKU Code and Batch Number:

- (a) SKU Code: CM53209-0.5MG or CM53209-2MG
- (b) Lot Number: S297.S17P1.072820

Purity, Activity, MS, and Loading:

- (a) HPLC analysis: $\geq 99\%$ of one MMAE labeled HRP, free of any unreacted HRP and MMAE (Chromatography purified).
- (b) MALDI-TOF MS Data for Intact Conjugate: 43887.9 Da
- (c) HRP Activity: ≥ 110 units/mg protein [Unit Definition. One unit is amount of enzyme that will form 1.0 mg purpurogallin from pyrogallol in 20 sec. at pH 6.0 at 20 °C]
- (d) MMAE over HRP ratio: 1

Intended Use: For research and development use only.

Hazard Information: See SDS.

Shelf life, Storage/Stability: The conjugate is fairly stable as solid at ambient temperature. Recommended long-term storage is at -20°C or preferably in a -80°C freezer. After reconstitution, the stock solution could be used up to 1 week if stored at 2-8°C, and for about 2-4 weeks if stored frozen at -20°C or below; without significantly losing HRP activity.

Expiration date: 1 year after receiving if stored at -20°C or below.

Data Appendix: Size exclusion HPLC and MALDI-TOF MS Data.



CellMosaic, Inc. www.cellmosaic.com
10 A Roessler Road, Woburn, MA 01801, USA.

**SEC HPLC Analysis of HRP-MMAE
(1:1) (Lot# S297.S17P1.072820)**

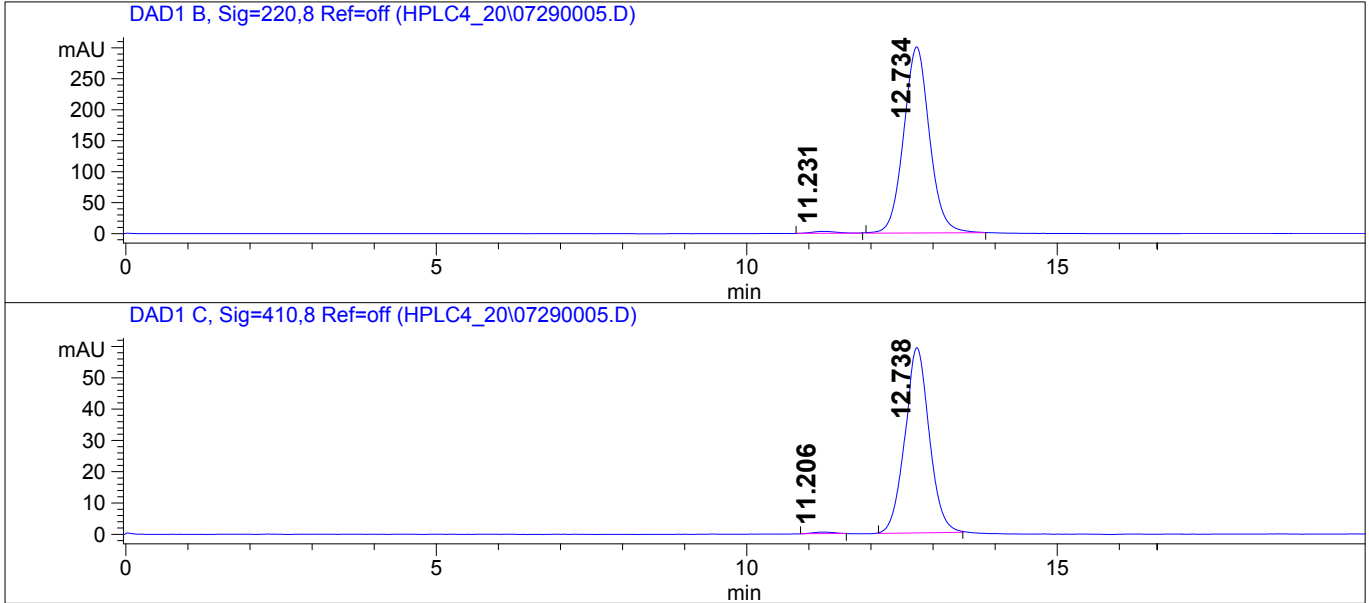
HPLC ANALYSIS DATA

Data Acquired By: QC
Sample Location: Vial 62
Sample Name: S297.S17P1.0728

Actual injection Volume: 10.0 uL
Sequence Name:
Method: C:\HPCHEM\1\METHODS\TSK-L5.M
Pressure: 49.8 bar
Flow: 0.750 mL/min
Temp (C): 25.0 C

-- SAMPLE INFORMATION --
S297.S17P1.0728
x2 ->

CHROMATOGRAM (UV/Vis)



Signal Description Wavelength (nm), Bw	Retention Time [Min.]	Area [mAU.s]	Area %
DAD1 B, Sig=220,8 Ref=off	11.231	89.8	1.0
	12.734	8694.5	99.0
DAD1 C, Sig=410,8 Ref=off	11.206	11.1	0.7
	12.738	1617.1	99.3

*****END OF REPORT*****

Spectrum Report

Final - Shots 1250 - LAJ_7297_01; Run #13; Label E16

+1MMAE

MALDI-TOF MS of HRP-MMAE (S297.S17P1.072820)

