



CERTIFICATE OF ANALYSIS

PRODUCT: Paraherquamide A, [Antibiotic VM 29919]
C₂₈H₃₅N₃O₅, CAS [77392-58-6], MW 493.6

PRODUCT NUMBER: P-1470

LOT NUMBER: A9102

APPEARANCE: White Powder

SOLUBILITY: Soluble in ethanol, methanol, DMF or DMSO

PURITY (HPLC): >99 %

SOURCE: *Penicillium simplicissimum*

STORAGE & HANDLING: -20° C. Keep cool and dry.

CAUTION: For research & manufacturing use only. Not for human or drug use. The pharmacological and toxicological properties of this product have not been fully investigated. Use caution when handling. Do not use this compound if you are not fully trained or are unaware of the hazards involved.

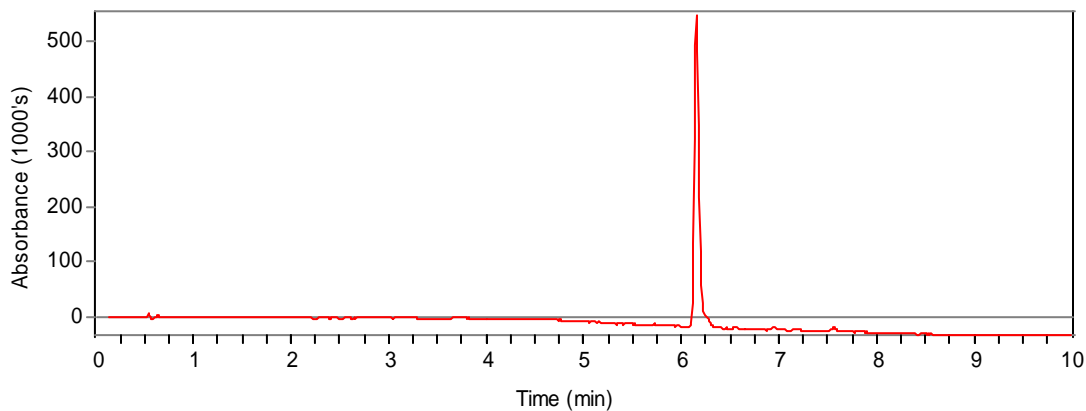
Verified:

A handwritten signature in black ink, appearing to read 'Chip S. J.', is written over the 'Verified:' text.

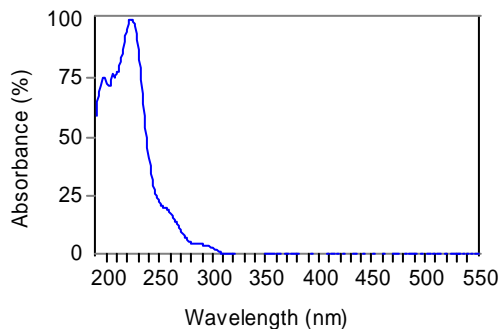
Paraherquamide A, (Lot# A9102)

HPLC Trace – C18 reverse phase (Platinum EPS rocket column). Conditions: gradient 0.0067 M sodium phosphate buffer to 75% in acetonitrile in 0.0067 M sodium phosphate buffer . Paraherquamde A (LOT# A9102) dissolved in methanol (5 ul, 0.5 mg.ml) analysed using a new column. Analysis at 205 nm gave purity >99% contains no detectable levels of analogues, degradation products or fatty acid contamination. UV spectra of peak eluting at 6.15 min is identical with standard.

FP116A.SR1.89-4 5 ul (new column)

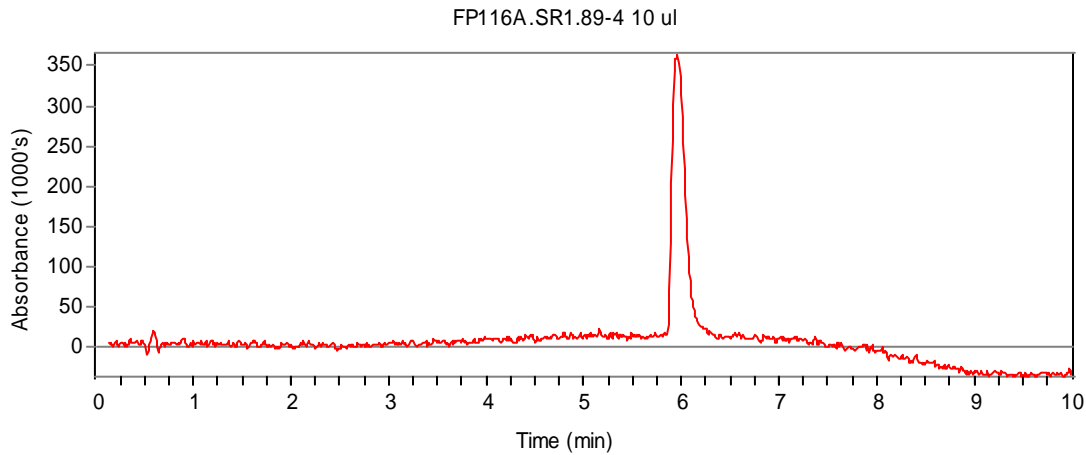


6.15 min



Paraherquamide A, (Lot# A9102)

HPLC Trace – C18 reverse phase (Platinum EPS rocket column). Conditions: gradient 10% acetonitrile in water containing 0.01% TFA to 100% acetonitrile containing 0.01% TFA. Paraherquamide A (LOT# A9102) dissolved in methanol (10 ul, 0.5 mg/ml) analysed using a new column. Analysis at 205 nm gave purity >99% contains no detectable levels of analogues, degradation products or fatty acid contamination. UV spectra of peak eluting at 5.96 min is identical with standard. NTOE: broader peak is typical of alkaloids under TFA conditions)



Paraherquamide A, (Lot# A9102)

Mass Spectrometry – ES. Confirmed molecular ion, $M + H$: m/e 494 with $M + Na$: m/e 516 ,
 $M + K$: m/e 532 adducts together with $2M + H$: m/e 987 and $2M + Na$: m/e 1009. Data is
consistent with standard sample of paraherquamide.

