

PhytoLab GmbH & Co. KG Dutendorfer Str. 5-7 91487 Vestenbergsgreuth

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Date: 27.01.20

Cust.No: 96888

### Certificate of analysis

Report-No.: 98749586-09-002  
Batch: 12457  
Article: 83243 Manassantin A

Test	Unit	Limit	Testresult
Appearance, SOP 100005		powder	Conform
Color, SOP 100006		white-yellowish	Conform
Solubility, SOP 105001:			Conform
Alcohols		soluble	Conform
Methanol		soluble	Conform
Water		sparingly soluble	Conform
Identification (UV spectrum from HPLC-DAD analysis) according to specification, SOP 204311		Conform	Conform
Identification (IR-spectroscopy, Ph.Eur. 9.0, 2.2.24)/USP 42 NF 37 <197>), SOP 206000		Conform	Conform
Identification (1H-NMR-spectroscopy), (outsourced), SOP 206010		Conform	Conform
Identification (13C-NMR-spectroscopy), (outsourced), SOP 206020		Conform	Conform
Peakpurity, (HPLC), SOP 401367		Conform	Conform
Manassantin A (HPLC), method 1 (% AU), SOP 441118	%	>= 98.00	100.00

#### Assessment:

The above mentioned reference substance meets the specification.

The chromatographic purity is checked regularly: the last analysis has been performed in July 2017.

The reference substance cannot be documented with an expiry date. The pack is closed and is recommended to be stored as indicated. The unopened product is guaranteed to fulfill the specifications of this analytical report for a period of 60 months. Once opened we can no longer guarantee the stability of the material.



**Certificate of analysis**

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Vestenbergsreuth, 27.01.20

Dr. Jan Glaser  
Manager Reference Substances

This is a computer print and valid without signature. A signed certificate of analysis can be taken on request.

**Example only**