

CERTIFICATE OF QUALITY

No.: 1911D287

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CUSTOMER: A.C.E.F. SPA

PRODUCT: **ALPROSTADIL**
7-[(1R,2R,3R*)-3-Hydroxy-2-[6-(3S)-3-hydroxy-1-octenyl]-5-oxocyclopentyl]-heptanoic acid
C₂₀H₃₄O₅ = 354.5
CAS – 745-65-3

BATCH No.: 1805S001

PRODUCTION DATE: 05/2018

ATEST No.: A180157

QUANTITY: 2 x 1.0 g

RETEST DATE: 05/2021

TEST METHOD:	SPECIFICATION:	RESULT:
1. Identification		
a) by IR spectrum	IR spectrum conforms with IR of RS Ph.Eur.	IR spectrum conforms
b) by RT WS HPLC	K = 0.90 – 1.10 RT of RS	1.00
2. Appearance		
a) visual	a white or off-white crystalline material	a white crystalline ² material
b) by absorbance	the sum of absorbance NMT 0.150	0.004
3. Assay (HPLC, calculated with reference to anhydrous substance, abs. %):		
	95.0 - 102.5 % *	99.2 %
4. HPLC purity (Ph.Eur. HPLC method, norm. %):		
a) PGA ₁	NMT 1.3 %	< 0.1 %
b) PGB ₁	NMT 0.1 %	not detected
other impurities		
c) 15-keto-PGE ₁	NMT 0.1 %	not detected
d) 15(R)-PGE ₁	NMT 0.1 %	not detected
e) 11(β)-PGE ₁	NMT 0.5 %	not detected
f) 8-iso-PGE ₁	NMT 0.1 %	not detected
g) PGE ₂	NMT 0.5 %	not detected
h) 5-trans-PGE ₂	NMT 0.5 %	not detected
i) PGE ₁ ethylester	NMT 0.3 %	not detected



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TEST METHOD:	SPECIFICATION:	RESULT:
j) PGE ₁ isopropylester	NMT 0.3 %	not detected
k) TPPO	NMT 0.5 %	not detected
l) unspecified impurities single	NMT 0.10 %	0.05 %
m) impurities total	NMT 1.5 %	0.1 %
5. HPLC purity (in-house HPLC method, mol. %):		
a) 14-methyl-PGE ₁	NMT 0.15 %	not detected
b) PGD ₁	NMT 0.1 %	not detected
c) 4-trans-PGE ₂	NMT 0.15 %	not detected
d) 6-trans-PGE ₂	NMT 0.15 %	0.12 %
e) 13,14-dihydro-PGE ₁	NMT 0.15 %	not detected
f) unspecified impurities single	NMT 0.10 %	0.05 %
6. Water content	NMT 0.5 %	0.1 %
7. Residue on ignition	NMT 0.5 %	0.1 %
8. Spec. optic rotation (c=1, ethanol) [α] _D ²⁰	-70.0° to -60.0°	-67.2°
9. Content of solvents (USP GC method):		
a) Acetone	NMT 0.5 %	< 0.5 %
b) Chloroform	NMT 10 ppm	not detected
c) <i>n</i> -Hexane	NMT 290 ppm	< 290 ppm
d) Dichloromethane	NMT 5 ppm	not detected
e) Tetrahydrofurane	NMT 10 ppm	not detected
f) Ethyl acetate	NMT 300 ppm	not detected
g) <i>tert.</i> Butyl methyl ether	NMT 300 ppm	not detected
h) Methyl alcohol	NMT 300 ppm	not detected
i) Isopropyl alcohol	NMT 300 ppm	not detected
j) <i>n</i> -Heptane	NMT 300 ppm	not detected
k) Toluene	NMT 20 ppm	not detected
l) <i>n</i> -Pentane	NMT 300 ppm	< 300 ppm
11. Heavy metals:		
a) rhodium content	NMT 20 ppm	9 ppm
b) chromium content	NMT 20 ppm	< 1 ppm

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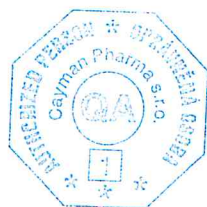
TEST METHOD:	SPECIFICATION:	RESULT:
12. Microbial testing (CFU/g):		
Total aerobic microbial count	NMT 10^2 (2×10^2) CFU/g	<100 CFU/g
Total yeasts & moulds count	NMT 10^1 (2×10^1) CFU/g	< 10 CFU/g
Specific microorganisms:		
- Bile-tolerant G ⁻ bacteria	0 CFU/g	not found
- Salmonella sp.	0 CFU/g	not found
- Escherichia coli	0 CFU/g	not found
- Staphylococcus aureus	0 CFU/g	not found
- Pseudomonas aeruginosa	0 CFU/g	not found

* 95.0 - 102.5 % at re-testing

RESULT: Product has been manufactured in accordance with principles of GMP as detailed in ICH Guideline Q7A

Product conforms to the specification in SBR380K/06, App. No. 2

Note: Product conforms to the specification in Ph. Eur. 9 and Microbial testing of product conforms to the specification in Ph. Eur. 9, harmonised method.



Ing. Dagmar Goldšmídová
Authorized Person
(pursuant to EudraLex 4/II, §2.14 & §2.32.1)

Date: Nov 15, 2019

Agrovet Market (±)-Cloprostenol

-ebro[®]

General information

PLEASE SEND PDF FILE TO E-MAIL: datalogger@caymanpharma.cz



Device information

Logger type	EBI 330-T30 V1.07.0	Programmed by	Cayman Pharma s.r.o.
Serial	75022090		

Logging configuration

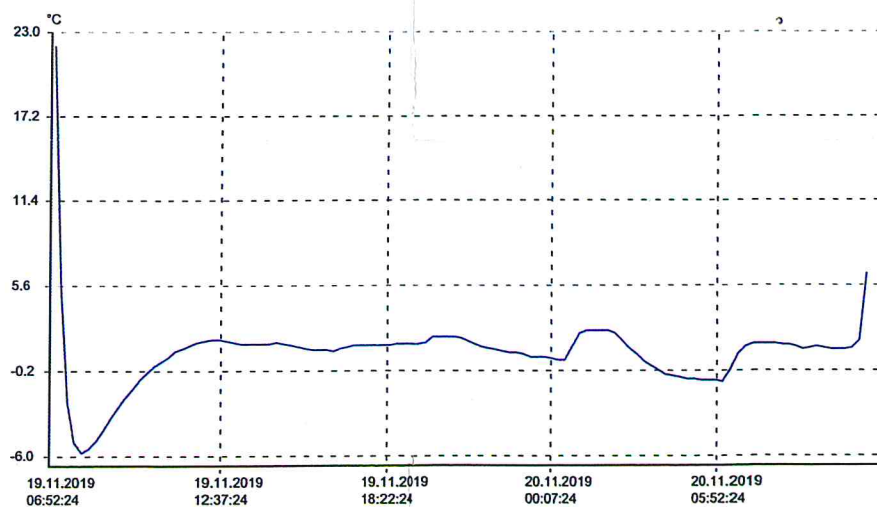
Mode	Until memory is full	Start time	19.11.2019 06:52:24
Interval	15 min.	Stop time	20.11.2019 11:22:24
Duration	1d 04:30:00	Data count	115

Alarm conditions

Alarm delay	30 min.		
☒ Low limit	-30.0 °C	☒ High limit	40.0 °C

Statistics

Minimum	Maximum	Average
-5.7 °C	22.1 °C	1.0 °C



Signature

20.11.2019 11:26:58 UTC+01:00
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