



AGENCIJA REPUBLIKE SRBIJE
ZA VEŠTAČENJE I ISTRAŽIVANJE
U OBLASTI FARMACEVTSKIH I
DROGA IŠKORIŠĆENJA
POSREDOVANJE U PROMETU
SROČNIM IZUMOVIMA
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EXPERT RESEARCH PROTOCOL

from 08/22/2015

Code: 15-08-20-1 (101)
Customer: [REDACTED]
Number of samples: Qualitative analysis of the sample, determination of purity
Methods: Agilent 1200, High-performance liquid chromatography (HPLC);
Column: Zorbax SB-C18 150 mm×2.1 mm, 3 mkm;
Detector – DAD, wavelength – 215, 240 nm;
Detector – MSD, ionization method APCI Positive, SCAN (100-500 m/z)
Number of samples: 1
Subject: Dianabol (Methandrostenolone)

The solvent for the sample: Chloroform.

Mobile phase: A - MeOH (65%), B - H₂O (45%).

The elution mode is isocratic.

The flow rate through the column: 0.3 ml/min. Thermostat: 30°C.

Single quadrupole mass analyzer is used for identification of the chemical elements. The samples were ionized at the electrostatic spraying (ESI) and atmospheric pressure with chemical ionization (APCI) mode with fixed positive and negative ions.

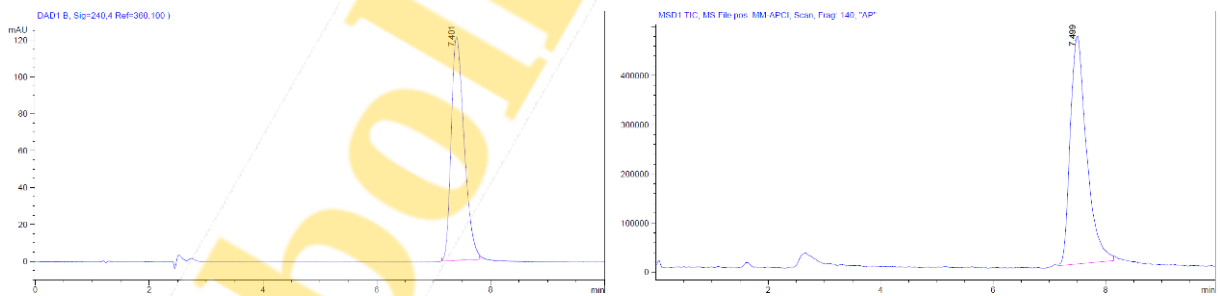
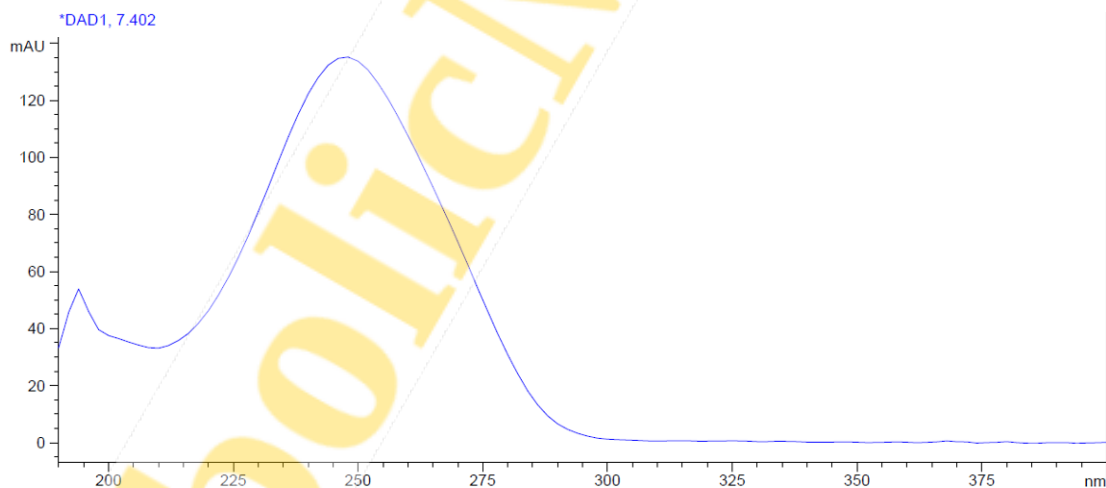


Fig.1. The component output chromatogram of the sample, detector DA, MS in AP

Tbl. 1. The calculation results of the peak areas on Fig. 1

Area Percent Report						
Sorted By : Signal						
Multiplier : 1.0000						
Dilution : 1.0000						
Use Multiplier & Dilution Factor with ISTDs						
Signal 1: DAD1 B, Sig=240,4 Ref=360,100						
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	7.401	BB	0.2446	1918.37329	121.21187	100.0000
Totals :				1918.37329	121.21187	
Signal 2: MSD1 TIC, MS File						
Peak #	RetTime [min]	Type	Width [min]	Area	Height	Area %
1	7.499	BB	0.3096	9.35695e6	4.64457e5	100.0000
Totals :				9.35695e6	4.64457e5	

The analysis results of the received peaks by detector DA are shown in Fig. 2

**Fig. 2. The analysis of the peak 1, DA detector**

The analysis results of the received peaks by detector MS are shown on Fig. 3

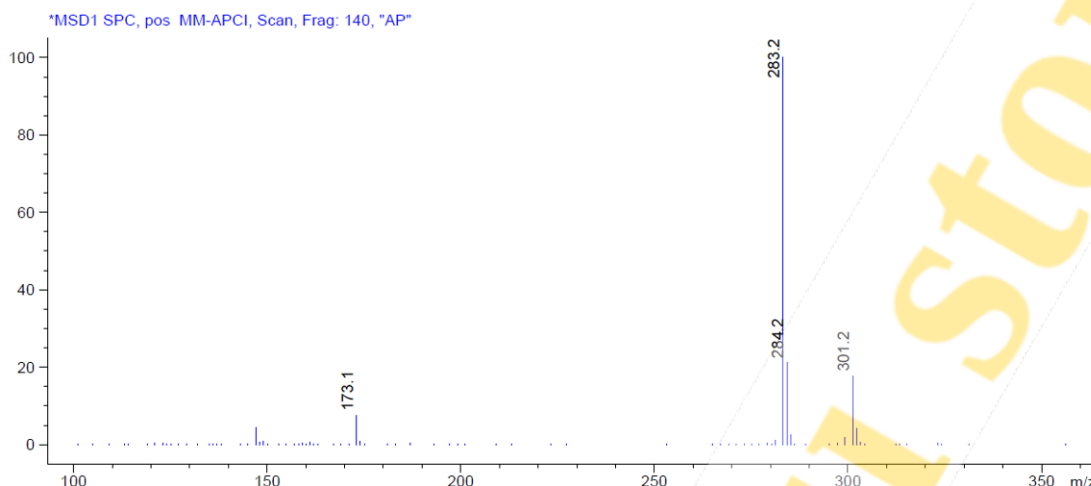


Fig. 3. The analysis of the peak 1, MS detector (mode AP)

The received data of the analytical comparison results of MS detectors with the calculated data on the test substance allow us to state that peak 1 refers to Methandrostenolone (mw 300.441).

The chromatographic purity of Methandrostenolone by MS and DA detectors is 98%.

Remarks:

1. This document was issued based on the results of examination of provided samples. This document does not guarantee the overall quality of the products.
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