



## Certificate of Analysis

### Ledipasvir Acetone 99%

**Catalog Number:** LA1006  
**Lot Number:** 1031702  
**CAS Number:** 1441674-54-9  
**Molecular Formula:**  $C_{49}H_{54}F_2N_8O_6 \cdot C_3H_6O$   
**Molecular Weight:** 947.08  
**Storage:** 2°C – 8°C  
**Date of Manufacture:** July 15, 2017  
**Retest Date:** July 14, 2019

Test	Specification	Result
Appearance	White to light tan to pink powder	Conforms
Assay (HPLC)	98.0 – 102.0%	99.45%
Identification (HPLC, IR)	Equivalent to standard	Conforms
Acetone Content (GC)	6.0 – 8.0%	7.85%
Solubility	N,N-Dimethylformamide	Conforms
Moisture	≤ 2.0%	0.13%
Residue on Ignition	≤ 0.1%	0.03%
Impurities (HPLC)		
Individual	≤ 0.15%	0.12%
Total	≤ 1.0%	0.32%
Heavy Metals	≤ 20ppm	< 20ppm
Residual Solvents		
Acetonitrile	≤ 410ppm	Not detected
Dichloromethane	≤ 600ppm	Not detected
DMF	≤ 880ppm	Not detected
Ethyl Acetate	≤ 5,000ppm	1,961ppm
Isopropyl Acetate	≤ 5,000ppm	11ppm
Isopropyl Alcohol	≤ 5,000ppm	Not detected
Methanol	≤ 3,000ppm	Not detected
Methyl Tertiary Butyl Ether	≤ 5,000ppm	Not detected
Toluene	≤ 890ppm	17ppm

Approved by:

Date: November 1, 2017

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