



# Certificate of analysis

Productname: Clofarabine

Cas number: 123318-82-1

Molecular Formula: C<sub>10</sub>H<sub>11</sub>ClFN<sub>5</sub>O<sub>3</sub>

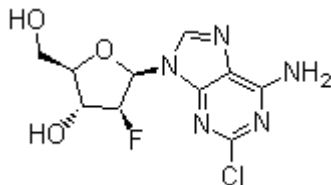
Molecular Weight: 303.68

Date of production: Dec. 18, 2014

Batch No: 20141218

Exp Date: Dec. 17, 2016

Chemical structure:



Items	Specifications	Results
Description	A white powder	A white powder
Specific Rotation	+ 38° ~ + 42° (C=0.5 DMF)	+ 39.5°
Melting point	225°~230°	227°~229°
Water	≤0.5%	0.13 %
α- isomer	≤0.3%	Not detectable
The single impurity	≤0.2%	0.08%
Total impurities	≤1.0%	0.7%
Heavy metals	Not more than 10 ppm	complies
Residue on Ignition	Not more than 0.1%	0.03%
purity by HPLC	> 99 %	99.3%

**Conclusion: It complies with the Enterprise Standard.**