

Hubei Hanways Pharchem Co., Limited

18-1-802, Green Garden, Changgang Road, Wuhan City 430023, China Tel: 86 13886199739 Fax: 86 27 83912198 Email: postmaster@hanwayschem.com , hanways@163.com

CERTIFICATE OF ANALYSIS

Product Name: Velpatasvir	Cas No.: 1377049-84-7	
Batch No.: 160501	Production Date: 2016-05-13	
Analysis Date: 2016-05-19	Retest Date: 2018-05-12	

Item	Specification	Result
Appearance	White to yellow powder	Off-white powder
Identification	IR: The IR absorption spectrum of the sample must be concordant with Test Standard	Conforms
	HPLC: The HPLC spectrum of the sample be concordant with the standard substance	Conforms
Related Substances	Any other impurity: NMT 0.3%	0.27%
	Total impurities: NMT 1.0%	0.57%
Residual Solvents	Meets current ICH requirement	Conforms
Residue on ignition	Not more than 0.2%	Conforms
Heavy Metals	Not more than 20ppm	Conforms
Assay (basis on anhydrous)	98.0% ~ 102.0%	99.1%
Conclusion	The results above meet all requirements under in-house standard	

Analst: Wan Qiuhong Checker: Ma Yan Approver: Zhao Wenhui