Jinan Hongfangde Pharmatech Co., Ltd. Tel:0531-88870908, Fax:0531-8887090 Email: shfdchem@163.com

Website: www.hfdchem.com

CERTIFICATE OF ANALYSIS

| Product name | Entecavir | CAS | 209216-23-9 |
|--------------|------------|-------------|-------------|
| Batch No. | 20190303 | Expiry date | 2022.03.02 |
| Report Date | 2019.03.12 | Quantity | 1250g |

| Inspection Items | Accepted Standard | Results |
|--------------------|---|--------------|
| Appearance | White or almost white powder. | Complies |
| solubility | Slightly soluble in water, methanol, Ethanol. | Complies |
| Optical rotation | +24.0 °~+28.0 ° | +26.8 ° |
| Identification | A:Specific optical rotation | Complies |
| | B: By IR, To match with working standard | Complies |
| Water | 5.8%~7.0% | 6.2% |
| Impurity F | ≤0.1% | Not found |
| Related Substances | Unspecified impurity ≤0.1% | 0.01% |
| | Total impurities ≤0.3% | 0.03% |
| Sulfated ash | ≤0.1% | 0.07% |
| Heavy | ≤10ppm | Complies |
| Residual solvents | Dichloromethane≤600ppm. | Not detected |
| | Methanol≤3000ppm | Not detected |
| | Ethyl acetate≤5000ppm | 200 ppm |
| | Toluene≤890ppm | Not detected |
| Particle size | 95% of the particles should be within 125um | Complies |
| Assay | 98.0%~102.0% | 99.9% |
| Conclusion: Comp | olies with EP9.0. | • |

Analyst :lichao Checker: shilijuan Supervisor :maohongjun