

Certificate of Analysis

Product name	Bulk of Pertuzumab (380610-27-5)	
Batch No.	20180628	
Expire Date	2020-02	
Storage condition	Sealed and stored at -70 ± 15 °C for long term storage and 2-8 °C for short term storage (< 1 months)	
Test items	Quality standard	Results
1. pH value	Corresponds to reference standard	Pass
2. Purity		
2.1 Reduced CE-SDS	Heavy chain and light chain NLT 95.0%	98.3%
2.2 Non-reduced CE-SDS	Main peak NLT 90.0%	93.6%
2.3 SEC-HPLC	Main peak NLS 95.0%	99.3%
3. Isoelectric Point	Corresponds to reference standard	Pass
4. Bacterial Endotoxins Test	≤ 0.125 EU/mg	Pass
5. Ultraviolet Spectra Scanning	278 ± 3 nm	278nm
6. Residual Proteins of Host Cell	≤ 100 ppm	3
7. Exogenous Residual DNA	≤ 100 pg/mg	1
8. Residual protein A	≤ 100 ppm	1
9. Biological Activity	Compared with standard, the range of biological activity is from 80% to 125%.	106%
10. Osmolality	Corresponds to reference standard	Pass
11. Peptide mapping	Corresponds to reference standard	Pass
12. N-terminal sequence	Corresponds to reference standard	Pass

Analyst: Zhou Fengjie
 Date: 2018-06-28

