

## Certificate of Analysis

|                    |                                                                                    |             |                 |
|--------------------|------------------------------------------------------------------------------------|-------------|-----------------|
| Product            | Retatrutide                                                                        | CAS No.     | 2381089-83-2    |
| Product No.        | LJRET                                                                              | Batch No.   | LJRET2026051001 |
| Date of Mfg        | 2026/05/10                                                                         | Retest Date | 2028/05/09      |
| Test Method        | In-house                                                                           | Quantity    | 1.38kg          |
| Storage Conditions | Protected from light, sealed, store at $-20^{\circ}\text{C} \pm 5^{\circ}\text{C}$ |             |                 |

| Test                          | Acceptance Criteria                                                                                                           | Results      |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------|--------------|
| Appearance                    | White or off-white Powder                                                                                                     | White Powder |
| Clarity and Color of Solution | The solution shall be clear and colorless.                                                                                    | Conforms     |
| Solubility                    | Freely soluble in water                                                                                                       | Conforms     |
| Identification by HPLC        | The retention time of the main peak of the test solution shall correspond to that of the main peak of the reference solution. | Conforms     |
| Mass spectrum                 | Relative Molecular Mass<br>$4731.4 \pm 1.0$ Da                                                                                | Conforms     |
| Amino Acid Ratio              | Tyr 2.7~3.3                                                                                                                   | 3.1          |
|                               | Aib 1.8~2.2                                                                                                                   | 2.1          |
|                               | Glu 4.5~5.5                                                                                                                   | 4.9          |
|                               | Gly 3.6~4.4                                                                                                                   | 3.9          |
|                               | Thr 1.8~2.2                                                                                                                   | 2.0          |
|                               | Phe 1.8~2.2                                                                                                                   | 2.0          |
|                               | Ser 4.5~5.5                                                                                                                   | 5.0          |
|                               | Asp 1.8~2.2                                                                                                                   | 2.0          |
|                               | Ile 1.8~2.2                                                                                                                   | 2.0          |

|                      |                                                                |              |
|----------------------|----------------------------------------------------------------|--------------|
|                      | $\alpha$ MeLeu: 0.9~1.1                                        | 1.0          |
|                      | Leu 2.7~3.3                                                    | 3.0          |
|                      | Lys 1.8~2.2                                                    | 2.0          |
|                      | Ala 2.7~3.3                                                    | 3.1          |
|                      | Pro 3.6~4.4                                                    | 3.9          |
|                      | AEEA should be detected                                        | Conforms     |
| pH                   | 6.0~9.0                                                        | 6.9          |
| Water Content        | $\leq 8.0\%$                                                   | 2.1%         |
| Acetic Acid          | $\leq 0.5\%$                                                   | 0.4%         |
| Trifluoroacetic acid | $\leq 0.5\%$                                                   | Not Detected |
| Sodium Ion           | $\leq 5.0\%$                                                   | 1.6%         |
| Residual Solvents    | Methanol $\leq 0.3\%$                                          | 0.005%       |
|                      | Dichloromethane $\leq 0.06\%$                                  | Not Detected |
|                      | DMF $\leq 0.088\%$                                             | Not Detected |
|                      | Acetonitrile $\leq 0.041\%$                                    | 0.005%       |
| Related Substances   | Max single impurity $\leq 0.5\%$                               | 0.07%        |
|                      | Total Impurities $\leq 2.0\%$                                  | 0.20%        |
| Purity               | $\geq 98.0\%$                                                  | 99.8%        |
| Bacterial Endotoxin  | $\leq 5\text{EU/mg}$                                           | Conforms     |
| Microbial Limit      | Total Aerobic Microbial Count (TAMC)<br>$\leq 100\text{cfu/g}$ | Conforms     |
|                      | Total Yeasts and Molds Count (TYMC)<br>$\leq 10\text{cfu/g}$   | Conforms     |
|                      | Escherichia coli: Not detectable in 1g                         | Absent       |

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|                 |                                                                                                                                                                         |       |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| Assay           | It contains 95.0% to 105.0% of Tirzepatide (C <sub>221</sub> H <sub>343</sub> N <sub>46</sub> O <sub>68</sub> ), calculated on the anhydrous and sodium-ion-free basis. | 99.7% |
| Peptide Content | ≥85.0%                                                                                                                                                                  | 96.1% |
| Conclusion      | <input checked="" type="checkbox"/> Meet the requirements <input type="checkbox"/> Do not meet the requirements                                                         |       |

Reporter/Date: 张洁 2026/5/15

Approver/Date: 刘辉 2026/5/15



Storage: In an air tight container, protected from light.  
Temperature :Short Term:2-8℃ ; Long Term: -20℃±5℃

It is only supplied as chemical product.  
It is only for R&D use.