



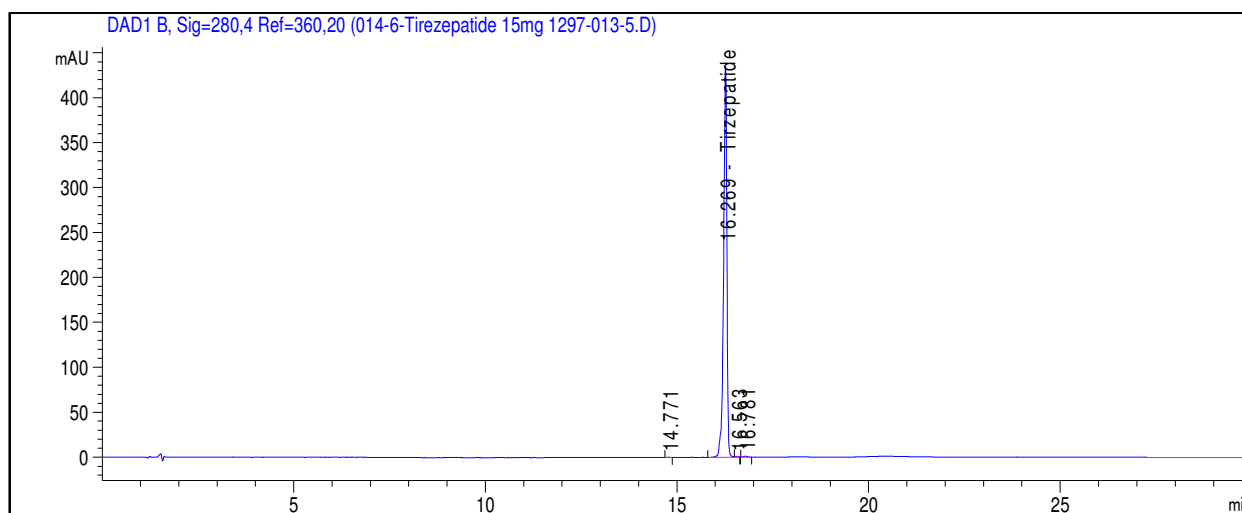
# CERTIFICATE OF ANALYSIS

## Tirzepatide

Material ID : Tirzepatide 15mg  
Lot Number : 180124-T1D-G  
Analysis Date : February 20, 2024  
Molecular Formula : C<sub>225</sub>H<sub>348</sub>N<sub>48</sub>O<sub>68</sub>  
PubChem CID : 156588324  
Method : LC-MS and LC/UV

Client : **Optima Chemical Supply**  
<https://optimasupply.net>

### CHROMATOGRAM



### PEAK TABLE

| Peak # | Time (min) | Area % | Compound    | Detector @ 280-nm |
|--------|------------|--------|-------------|-------------------|
| 1      | 16.269     | 99.6   | Tirzepatide |                   |
| 2      | 16.563     | 0.1    |             |                   |
| 3      | 16.781     | 0.2    |             |                   |

### RESULTS

| Analysis                       |  |                 |
|--------------------------------|--|-----------------|
| HPLC/UV Purity (%)             | 99.6   |                 |
| Mass Spectrum Evaluation       | <u>Measured</u>  | <u>Expected</u> |
| -Molecular Mass (g)            | 4811.50  | 4810.52         |
| -Peak Identification           | Data consistent with molecular formula of the compound |                 |
| Measured Tirzepatide (mg/vial) | 13.74  |                 |

Note: Vial may contain salts and buffers, not normally detected by UV and not considered impurities.

Work Certified by  
Martin S. Ruszaj  
Technical Director  
Actylis Buffalo - USA  
[MRuszaj@actylis.com](mailto:MRuszaj@actylis.com)

February 22, 2024

Actylis is committed to providing objective, unbiased services by consistently producing the most accurate data possible using advanced instrumentation backed by a quality assurance program. However, these services are performed without warranty or liability of any kind beyond the amount paid to the laboratory for these services. Actylis and its employees accept no legal responsibility for our client's interpretation or use of test results.

