

### Certificate of Analysis

|              |           |
|--------------|-----------|
| Product Name | Glutamine |
| Catalog No.  | V15632    |
| Batch No.    | V1563201  |

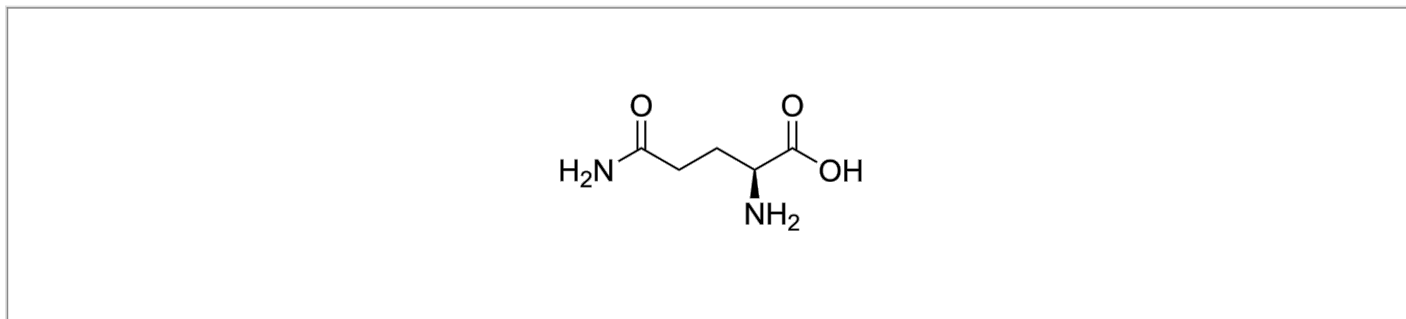
#### 1. Physical and Chemical Properties

|                   |  |
|-------------------|--|
| Appearance        | Powder   |
| Molecular Formula | C <sub>5</sub> H <sub>10</sub> N <sub>2</sub> O <sub>3</sub> |
| Molecular Weight  | 146.14   |
| Purity            | ≥98%   |
| CAS No.           | 56-85-9  |
| Production Date   | 2024-02-06   |

#### 2. Analytical Data

|               |                           |
|---------------|---------------------------|
| HPLC          | Indicates ≥98% purity     |
| NMR           | Consistent with structure |
| Mass Spectrum | Consistent with structure |

#### 3. Structure



#### 4. Storage Condition

|                   |            |       |          |
|-------------------|------------|-------|----------|
| Storage Condition | Powder     | -20°C | 3 years  |
|                   |            | 4°C   | 2 years  |
|                   | In solvent | -80°C | 6 months |
|                   |            | -20°C | 1 month  |

Products are for research use only • Not for human or veterinary use