

## Analytical Data Sheet

Lot number **1056583**  
not for drug use

Catalog number **E-1655.0025**  
Product number **4001695.0025**  
Product **H- Ser(tBu) - OH**  
Molecular formula  $C_7H_{15}NO_3$   
Relative molecular mass 161.20

| Tests                               | Results   |        |       |           |           |          |          |          |          |
|-------------------------------------|---|--------|-------|-----------|-----------|----------|----------|----------|----------|
| Appearance                          | white powder  |        |       |           |           |          |          |          |          |
| Appearance of solution              | clear, colorless solution (50 mg/mL in acetic acid 80%)   |        |       |           |           |          |          |          |          |
| Identification (elemental analysis) | <table> <thead> <tr> <th>Theory</th> <th>Found</th> </tr> </thead> <tbody> <tr> <td>C = 51.1%</td> <td>C = 51.2%</td> </tr> <tr> <td>H = 9.4%</td> <td>H = 9.4%</td> </tr> <tr> <td>N = 8.5%</td> <td>N = 8.5%</td> </tr> </tbody> </table> <p>calc. x 0.19 H<sub>2</sub>O (2.1%)</p> | Theory | Found | C = 51.1% | C = 51.2% | H = 9.4% | H = 9.4% | N = 8.5% | N = 8.5% |
| Theory                              | Found   |        |       |           |           |          |          |          |          |
| C = 51.1%                           | C = 51.2%   |        |       |           |           |          |          |          |          |
| H = 9.4%                            | H = 9.4%  |        |       |           |           |          |          |          |          |
| N = 8.5%                            | N = 8.5%  |        |       |           |           |          |          |          |          |
| Identification (TLC)                | complies with authentic material  |        |       |           |           |          |          |          |          |
| Melting point                       | 237 °C  |        |       |           |           |          |          |          |          |
| Specific optical rotation           | $[\alpha]_D^{24} = -17.0^\circ$ (1% in water)   |        |       |           |           |          |          |          |          |
| Purity (TLC)                        | > 99%   |        |       |           |           |          |          |          |          |
| TLC conditions                      | n-butanol/acetic acid/H <sub>2</sub> O 4/2/2<br>ethylacetate/pyridine/acetic acid/H <sub>2</sub> O 6/4/1/3<br>chloroform/methanol/acetic acid 32% 5/3/1<br>plate: silicagel 60 F <sub>254</sub><br>detected by: UV, ninhydrin, chlorine-tolidine                                      |        |       |           |           |          |          |          |          |
| Assay (elemental analysis)          | 98.2% (Cth 52.16%, Cfd 51.19%)  |        |       |           |           |          |          |          |          |
| Water content (KF volumetric)       | 2.1%  |        |       |           |           |          |          |          |          |