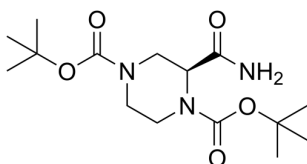


Certificate of Analysis

Compound Information

| | |
|----------------------------|---|
| Product Name: | (S)-di-tert-butyl 2-carbamoylpiperazine-1,4-dicarboxylate |
| Cat. No.: | 1048926 |
| CAS No.: | 1438393-12-4 |
| Molecular Formula: | C ₁₅ H ₂₇ N ₃ O ₅ |
| Molecular Weight: | 329.39198 |
| Chemical Structure: | |



Batch Information

| | |
|---------------------|---------------------|
| Batch No.: | Lf0509132482 |
| Storage: | Storage temp. 2-8°C |
| Test Date: | 2022-05-09 |
| Retest Date: | 2025-05-08 |
| Origin: | Shanghai, China |

QC Summary

| | |
|------------------------------------|---|
| Appearance: | White to off-white (Solid) |
| ¹H NMR Spectrum: | Consistent with structure |
| LCMS: | Consistent with structure |
| Purity (NMR): | ≥98.0% |
| OR(C=1.01g/100ml ETOH): | -18.6° |
| Conclusion: | The product has been tested and complies with the given specifications. |

Caution: Research use only and are not intended for human use.

Tel: 400-821-0725

E-mail: product@leyan.com

Address: No. 1999 Zhangheng Road, Building 3, Zhangjiang High-Tech Park, Shanghai