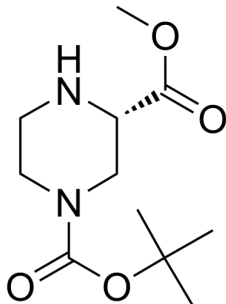
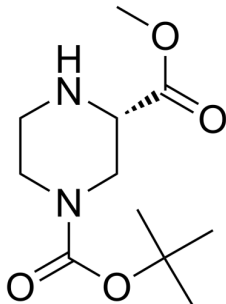


## Certificate of Analysis

### Compound Information

<b>Product Name:</b>	(S)-1-N-Boc-piperazine-3-carboxylic acid methyl ester
<b>Cat. No.:</b>	1051281
<b>CAS No.:</b>	314741-39-4
<b>Molecular Formula:</b>	C <sub>11</sub> H <sub>20</sub> N <sub>2</sub> O <sub>4</sub>
<b>Molecular Weight:</b>	244.29
<b>Chemical Structure:</b>	



### Batch Information

<b>Batch No.:</b>	L357276
<b>Storage:</b>	2-8°C, protect from light
<b>Test Date:</b>	2024-02-23
<b>Retest Date:</b>	2027-02-22
<b>Origin:</b>	Shanghai, China

### QC Summary

<b>Appearance:</b>	Off-white to light yellow (Solid)
<b><sup>1</sup>H NMR Spectrum:</b>	Consistent with structure
<b>Purity (NMR):</b>	≥98.0%
<b>Optical Rotation[α]:</b>	42.6661° (C=1.0022g/100ml CHCL <sub>3</sub> )
<b>Conclusion:</b>	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](mailto:product@leyan.com)

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