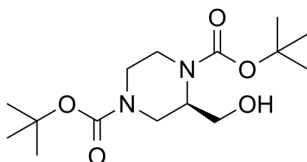


## Certificate of Analysis

### Compound Information

Product Name:	di-tert-Butyl (R)-2-(hydroxymethyl)piperazine-1,4-dicarboxylate
Cat. No.:	1199310
CAS No.:	1159598-21-6
Molecular Formula:	C <sub>15</sub> H <sub>28</sub> N <sub>2</sub> O <sub>5</sub>
Molecular Weight:	316.39
Chemical Structure:	



### Batch Information

Batch No.:	Lf0917168869
Storage:	Store at room temperature
Test Date:	2022-09-19
Retest Date:	2027-09-18
Origin:	Shanghai, China

### QC Summary

Appearance:	White to off-white (Solid)
<sup>1</sup> H NMR Spectrum:	Consistent with structure
Enantiomeric Excess:	100.00%
Purity (NMR):	≥98.0%
OR(C=1.00g/100ml CHCL <sub>3</sub> ):	25.1°
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](mailto:product@leyan.com)

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