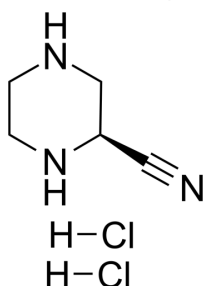


## Certificate of Analysis

**Product Name:** (S)-piperazine-2-carbonitrile (dihydrochloride)  
**Cat. No.:** CS-M3614  
**Batch No.:** 02752  
**Chemical Name:** (S)-piperazine-2-carbonitrile dihydrochloride

### PHYSICAL AND CHEMICAL PROPERTIES

**Molecular Formula:** C<sub>5</sub>H<sub>11</sub>Cl<sub>2</sub>N<sub>3</sub>  
**Molecular Weight:** 184.07  
**Storage:** Store at room temperature  
**Chemical Structure:**



### ANALYTICAL DATA

**Appearance:** White to off-white (Solid)  
**<sup>1</sup>H NMR Spectrum:** Consistent with structure  
**Purity (NMR):** ≥97.0%  
**Conclusion:** The product has been tested and complies with the given specifications.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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