

## Certificate of Analysis

IUPAC Spiro[bicyclo[2.2.1]heptane-7,1'-cyclopentan]-2-ene-5-carboxylic acid

Molecular Weight192.26Molecular FormulaC12H16O2Physical StateSolidStorage-20 °C

**Expiration Date** One year from date of receipt

Lot Number BB 0280372

Analysis	Specification	Result
Physical Examination	White Solid	PASS
TLC .	Ninhydrin: negative Iodine: one major spot	PASS
Chemical Purity (HPLC)	>95%	PASS
Mass Spectroscopy	$[M+H]^+ = 193.26 \pm 1 \text{ amu}$	$[M+H]^+ = 193.2$
<sup>1</sup> H NMR	Consistent with structure	PASS

Approved by The Head of Quality Assurance Department:

