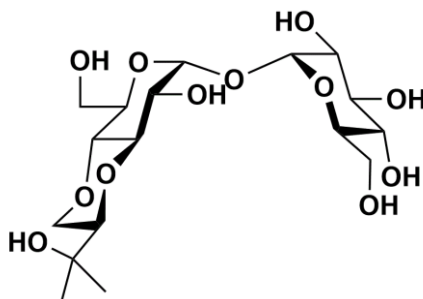


PRODUCT DATA SHEET

Date: Apr. 21, 2022

Lentztrehalose C

(Trehalase Resistant)



Specifications

| | |
|-------------------|--|
| Code No. | : 14680 |
| CAS# | : 1808096-68-5 |
| Molecular Formula | : C ₁₇ H ₃₀ O ₁₂ |
| Molecular Weight | : 426.415 |
| Source | : <i>Lentzea</i> sp. ML457-mF8 |
| Supplied as | : Powder |
| Purity | : >75% (qNMR) |
| Long Term Storage | : at -20 °C |
| Solubility | : Soluble in MeOH, DMSO, H ₂ O Insoluble in Hexane |

Application Notes

Lentztrehalose C is a biologically stable analog of trehalose, isolated from the solid-state culture of *Lentzea* sp. ML457-mF8 with lentztrehalose A.¹⁾ Lentztrehalose C is stable to porcine kidney trehalase.¹⁾ While trehalose was digested by various microbes such as *Escherichia coli* K-12, lentztrehalose C was not digested by those microbes.¹⁾ After the oral administration of lentztrehalose C to mice, it showed much better blood concentration compared to that of trehalose.¹⁾

References

- 1) Stability and bioavailability of lentztrehaloses A, B, and C as replacements for trehalose.
Wada S, *et al. J Agric Food Chem.* 2016 **64**(38) 7121-7126.