

# PRODUCT INFORMATION



## 1,1,1,1-Kestohexose

Item No. 36591

CAS Registry No.: 62512-19-0

Formal Name: O-β-D-fructofuranosyl-(2→1)-  
O-β-D-fructofuranosyl-(2→1)-O-  
β-D-fructofuranosyl-(2→1)-O-  
β-D-fructofuranosyl-(2→1)-β-D-  
fructofuranosyl α-D-glucopyranoside

Synonyms: GF<sub>5</sub>, Inulin-type Hexasaccharide

MF: C<sub>36</sub>H<sub>62</sub>O<sub>31</sub>

FW: 990.9

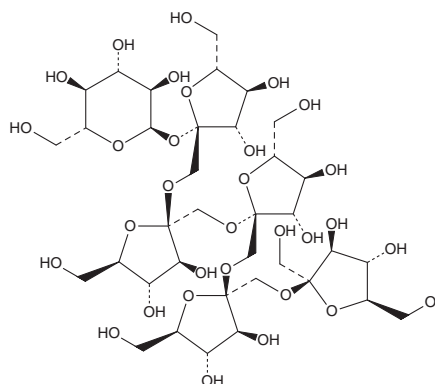
Purity: ≥98%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years

Item Origin: Plant/*M. officinalis*



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

1,1,1,1-Kestohexose is supplied as a solid. A stock solution may be made by dissolving the 1,1,1,1-kestohexose in water. We do not recommend storing the aqueous solution for more than one day.

### Description

1,1,1,1-Kestohexose is a fructooligosaccharide that has been found in *M. officinalis* and has neuroprotective and antidepressant-like activities.<sup>1-2</sup> It prevents decreases in viability and nerve growth factor (NGF) expression induced by corticosterone (Item No. 16063) in PC12 cells when used at concentrations of 0.625 and 1.25 μM.<sup>1</sup> 1,1,1,1-Kestohexose (20 mg/kg) reduces immobility time in the forced swim test in rats.<sup>2</sup>

### References

1. Li, Y.-F., Liu, Y.-Q., Yang, M., *et al.* The cytoprotective effect of inulin-type hexasaccharide extracted from *Morinda officinalis* on PC12 cells against the lesion induced by corticosterone. *Life Sci.* **75**(13), 1531-1538 (2004).
2. Zhang, Z., Yuan, L., Zhao, N., *et al.* Effect of inulin-type hexasaccharide on forced swimming in mice and rats and DRL 72 s in rats. *Zhongguo Yaolixue Tongbao* **17**(2), 164-167 (2001).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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