



**SZABO  
SCANDIC**

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](http://linkedin.com/company/szaboscandic)



# PRODUCT INFORMATION



## 1-Kestose

Item No. 34346

CAS Registry No.: 470-69-9

Formal Name: O- $\beta$ -D-fructofuranosyl-(2 $\rightarrow$ 1)- $\beta$ -D-fructofuranosyl  $\alpha$ -D-glucopyranoside

MF: C<sub>18</sub>H<sub>32</sub>O<sub>16</sub>

FW: 504.4

Purity:  $\geq$ 95%

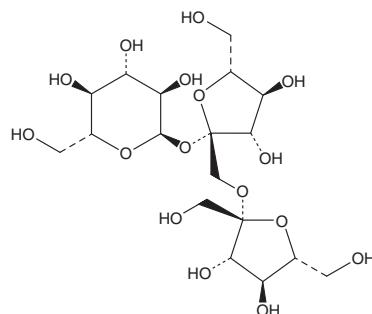
Supplied as: A solid

Storage: -20°C

Stability:  $\geq$ 2 years

Item Origin: Natural/Source unknown

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



### Laboratory Procedures

1-Kestose is supplied as a solid. Aqueous solutions of 1-kestose can be prepared by directly dissolving the solid in aqueous buffers. The solubility of 1-kestose in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

1-Kestose is a fructooligosaccharide that has been found in onions and has prebiotic and antidiabetic activities.<sup>1-3</sup> It increases levels of the beneficial bacterium *B. longum* in diluted adult human fecal samples when added to culture broth at a concentration of 0.5% w/v.<sup>2</sup> Dietary supplementation with 1-kestose increases the proportion of cecal *Anaerostipes* and *Bifidobacterium* content, improves glucose tolerance, and prevents the development of type 2 diabetes in Otsuka Long-Evans Tokushima Fatty (OLETF) rats.<sup>3</sup>

### References

1. Tochio, T., Kadota, Y., Tanaka, T., et al. 1-Kestose, the smallest fructooligosaccharide component, which efficiently stimulates *Faecalibacterium prausnitzii* as well as bifidobacteria in humans. *Foods* **7**(9), 140 (2018).
2. Endo, A., Hirano, K., Ose, R., et al. Impact of kestose supplementation on the healthy adult microbiota in *in vitro* fecal batch cultures. *Anaerobe* **61**, 102076 (2020).
3. Watanabe, A., Kadota, Y., Kamio, R., et al. 1-Kestose supplementation mitigates the progressive deterioration of glucose metabolism in type 2 diabetes OLETF rats. *Sci. Rep.* **10**(1), 15674 (2020).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 - USA

PHONE: [800] 364-9897  
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM