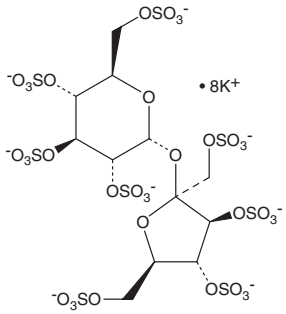
PRODUCT INFORMATION

Sucrose octasulfate (potassium salt)

Item No. 16382

CAS Registry No.:	73264-44-5
Formal Name:	2,3,4,6-tetrakis(hydrogen sulfate),1,3,4,6-tetra-O-sulfo-β-D-fructofuranosyl α-D-glucopyranoside, octapotassium salt
Synonyms:	SOS, Sucrosofate potassium
MF:	$C_{12}H_{14}O_{35}S_8 \bullet 8K$
FW:	1,287.5
Purity:	≥95%
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



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

Laboratory Procedures

Sucrose octasulfate (potassium salt) (SOS) is supplied as a crystalline solid. A stock solution may be made by dissolving the SOS in water. The solubility of SOS in water is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

SOS, a component of the gastrointestinal protectant sucralfate, is an alkaline aluminum–sucrose complex that inhibits peptic hydrolysis and raises gastric pH, protecting esophageal epithelium against acid injury.[1] It can bind to exosite II of thrombin (K_D = ~1.4 µM) and inhibit its catalytic activity (IC_{50} = 4.5 µM) and, as such, has been used as a surrogate for heparin.[2] Furthermore, SOS has been shown to inhibit tumor growth in mouse melanoma and lung carcinoma models by preventing fibroblast growth factor 2 (FGF-2) binding to endothelial cells and also by removing any pre-bound FGF-2 from these cells (IC_{50} = ~2 µg/ml).[3]

References

1. Furukawa, O., Matsui, H., and Suzuki, N. Effects of sucralfate and its components on acid- and pepsin-induced damage to rat gastric epithelial cells. *Jpn. J. Pharmacol.* **75(1)**, 21-25 (1997).
2. Desai, B.J., Boothello, R.S., Mehta, A.Y., *et al*. Interaction of thrombin with sucrose octasulfate. *Biochemistry* **50(32)**, 6973-6982 (2011).
3. Fannon, M., Forsten-Williams, K., Nugent, M.A., *et al*. Sucrose octasulfate regulates fibroblast growth factor-2 binding, transport, and activity: Potential for regulation of tumor growth. *J. Cell Physiol.* **215(2)**, 434-441 (2008).

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