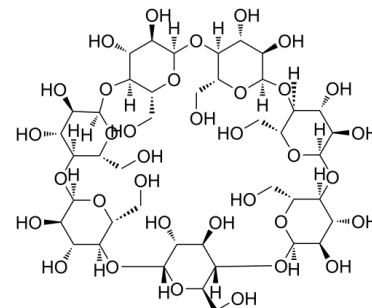


## Data Sheet

<b>Product Name:</b>	β-Cyclodextrin
<b>Cat. No.:</b>	CS-0027620
<b>CAS No.:</b>	7585-39-9
<b>Molecular Formula:</b>	C <sub>42</sub> H <sub>70</sub> O <sub>35</sub>
<b>Molecular Weight:</b>	1134.98
<b>Target:</b>	Influenza Virus
<b>Pathway:</b>	Anti-infection
<b>Solubility:</b>	H <sub>2</sub> O : 38.75 mg/mL (34.14 mM; Need ultrasonic)



### BIOLOGICAL ACTIVITY:

β-Cyclodextrin is a cyclic polysaccharide composed of seven units of glucose (α-D-glucopyranose) linked by α-(1,4) type bonds. β-Cyclodextrin has often been used to enhance the solubility of agents. β-Cyclodextrin has anti-influenza virus **H1N1** activities. *In Vitro* β-Cyclodextrin (Beta-cyclodextrin; β-CD) is a cyclic polysaccharide composed of seven units of glucose (α-D-glucopyranose) linked by α-(1,4) type bonds, which presents a hydrophilic external surface and a hydrophobic internal cavity<sup>[1]</sup>. In the pharmaceutical industry, β-Cyclodextrin (β-CD) has often been used to enhance the solubility of drugs, such as indomethacin, naringin, celecoxib, and citric acid<sup>[2]</sup>.

### References:

- [1]. Campos EVR, et al. Chitosan nanoparticles functionalized with β-cyclodextrin: a promising carrier for botanical pesticides. *Sci Rep.* 2018 Feb 1;8(1):2067.
- [2]. Cui L, et al. Effect of β-cyclodextrin complexation on solubility and enzymatic conversion of naringin. *Int J Mol Sci.* 2012 Nov 5;13(11):14251-61.
- [3]. Goncharova EP, et al. A Novel Sulfonated Derivative of β-Cyclodextrin Effectively Inhibits Influenza A Virus Infection in vitro and in vivo. *Acta Naturae.* 2019 Jul-Sep;11(3):20-30.

### CAIndexNames:

β-Cyclodextrin

### SMILES:

OC[C@@H]1[C@]2([H])[C@@H]([C@@H](O)[C@](O[C@]3([H])[C@H](O[C@@](O[C@]4([H])[C@H](O[C@@](O[C@]5([H])[C@H](O[C@@](O[C@@]6([H])[C@H](O)[C@@H](O)[C@@](O[C@@H]6CO)([H])O[C@@]7([H])[C@H](O)[C@@H](O)[C@@](O[C@@H]7CO)([H])O[C@@]8([H])[C@H](O)[C@@H](O)[C@@](O[C@@H]8CO)([H])O2)([H])[C@H](O)[C@H]5O)CO)([H])[C@H](O)[C@H]4O)CO)([H])[C@H](O)[C@H]3O)CO)([H])O1

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 610-426-3128

Fax: 888-484-5008

E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA