

Sucrose Analogs and Synthetic Derivatives

Introduction

In addition to sucrose (O-β-D-glucopyranosyl-(1,2)-β-D-fructofuranoside), Biosynth offers a range of naturally occurring analogs of sucrose that are found in many plant tissues and also honey. We also include a number of synthetic derivatives that find application in foods (sweeteners, high intensity sweeteners, emulsifiers), pharmaceuticals (dispersing agents), cosmetics (emulsifiers) and other industrial (surfactants) sectors.

Product Code	Cas no.	Product Name	Description
OK07034	470-69-9	1-Kestose	Non-reducing sucrose analog containing glucose and fructose
OK32473 OF59773	59432-60-9	1,1,1-Kestopentaose	Non-reducing sucrose analog containing glucose and fructose
OK59466	62512-19-0	1,1,1-Kestohexaose	Non-reducing sucrose analog containing glucose and fructose
OR06197	17629-30-0	D-Raffinose pentahydrate	Non-reducing trisaccharide containing galactose linked 1,6 to the glucose moiety in sucrose
OS04261	470-55-3	Stachyose 70%	Non-reducing tetrasaccharide, similar to Raffinose but with 2 galactose residues
OV13781	546-62-3	Verbascose	Non-reducing pentasaccharide, similar to Raffinose but with 3 galactose residues
OG44854	87419-56-5	4-O-β-D-Galactosylsucrose	Similar to Raffinose but with the galactose residue attached 1,4 to the glucose moiety
OE06974	13101-54-7	Erllose	Found in royal jelly and honey; sweetener; has low cariogenicity
OL06727	7158-70-5	Leucrose	Formed by enzymatic synthesis using <i>L. mesenteroides</i>
OM06904	597-12-6	D-Melezitose Hydrate	Produced by insects consuming plant sap; found in honeydew
ON07511	13133-07-8	Nystose	A short chain isomer of inulin
OT06692	547-25-1	D-Turanose	Reducing analog of sucrose not metabolized by higher plants
OS03658	126-14-7	Sucrose Octaacetate	Used in pesticides, herbicides and as bitterants
OS06110 OO174966	12738-64-6	Sucrose Octabenzoate	Compatible with synthetic resins; found in inks, adhesives, plastics
OS05733	54182-58-0	Sucralfate	Treats duodenal ulcers, GERD, stress ulcers; cytoprotective
OS06653	386229-69-2	Sucrose Heptasulfate K ⁺ salt	Treats duodenal ulcers, GERD, stress ulcers; cytoprotective
OS07384	74135-13-0	Sucrose Octasulfate NH ₃ salt	Treats duodenal ulcers, GERD, stress ulcers; cytoprotective
OS09348	126-13-6	Sucrose Acetoisobutyrate	Emulsifier; GRAS food additive in beverages
OS09352 OS15187	25168-73-4	Sucrose Monoctadecanoate	Surfactant and preservative in food; surfactant in cosmetics
OS09350	84066-95-5	Sucrose Distearate (30% mono.)	Surfactant and preservative in food; surfactant in cosmetics
OS09351	26446-38-8	Sucrose Palmitate	Surfactant and preservative in food; surfactant in cosmetics
OS04165	56038-13-2	Sucralose	Artificial sweetener; used in baking products with long shelf life
OH76250	309261-83-4	2,3,4,6,3',4',6'-Hepta-O-benzoylsucrose	Synthetic intermediate

About Biosynth

Securing Life Sciences Supply Chains - where Chemistry meets Biology, Products meet Services and Innovation meets Quality, Biosynth is at the Edge of Innovation.

With an unrivalled research product portfolio and end-to-end manufacturing services, we are science led and customer focused to solve problems and deliver key reagents at scale and quality. Our expertise and capability runs across Complex Chemicals, Peptides and Key Biologics all from one trusted partner.

Biosynth is an innovative life sciences reagents, custom synthesis and manufacturing services company. We are by scientists, for scientists, securing supply chains with consistent quality, across the globe. We manufacture and source a vast range of chemical and biochemical products, and take pride in delivering products that others cannot. We are experts in complex chemistry, peptides and key biological raw materials. We provide a full range of products and services to support life science research and development, with more than half a million products in our research catalog and hundreds of complex manufacturing service projects.

Our complex chemistry specialties include enzyme substrates, carbohydrate and nucleoside chemistry, with manufacturing services from the first idea to the finished product, from route scouting to GMP or ton scale production. For peptides, we also have a full end-to-end offering, from lead discovery and optimization, library production, through to GMP NCE or Neoantigen projects.

Across biologics we have a synergistic offering, with an extensive range of custom bioprocessing enzyme projects for production of key products. We are also able to offer custom antibody projects, and epitope mapping. Through the Biosynth group we also offer development of antibodies, antigens and supply of plasma for in vitro diagnostics.

The trusted supplier, manufacturer and partner for the pharmaceutical, life science and diagnostic sectors, along with customers across food, agrochemistry and cosmetics, we have facilities across three continents and a rapid global distribution network. Our main chemical research and manufacturing laboratories are in Switzerland, the United Kingdom, Slovakia and China, with peptide production in the USA and the Netherlands. Enzyme projects are based in Austria and biological IVD reagents in Ireland. Our R&D resources and production facilities are modern and versatile, allowing us to produce chemicals on the milligram to ton scale, and at ISO 9001 and GMP, with peptides at mg to multikilogram scale.

