Custom Amidites. Lipids. Linkers/Spacers.

Charting out new pathways
of Drug Development. Fast.

Amidites

Sai Life Sciences offers end-to-end services across R&D to manufacturing of Amidites. With higher numbers of Oligonucleotide therapeutics set to hit the market in the coming days, the R&D and manufacturing of amidites will be a crucial aspect for pharma & biotech companies and we at Sai Life Sciences are ready to meet the unique needs of our customers.

Our amidites capabilities include:

- 35-member dedicated team
- End-to-end capabilities: R&D – Tech Transfer – Pilot Scale – Commercial Production
- Dedicated Phosphoramidites manufacturing facility

Catalogue Phosphoramidites

- 2' Deoxy Phosphoramidites
- RNA Derivatives
- MOE Phosphoramidites
- Custom development and manufacturing
- Exclusive Supply to our partner
- Sugar modified nucleosides
- Base & sugar modified
- Base modified
- Linkers/Spacers building blocks
- Preoperatory nucleoside product exclusive for our partner

Linkers / Spacers

At Sai Life Sciences, we can prepare the protected Spacer and Linker individually and then prepare the **3'-triantennary** or

5'-triantennary. Linkers/Spacers is used for Oligonucleotide conjugates. By conjugating it directly to the Oligonucleotides or decorating it to a certain delivery system as a targeting moiety, Linkers/Spacers can succeed in the development of nucleic acid therapeutics.

Route of Synthesis

Areas of expertise in multi-kg scale

- Aza-Micheal reaction
- EDCI mediated peptide bond formation with impurity knowledge
- Tri-antennary intermediate synthesis
- Tri-amide bond formation
- Hydrogenolysis of benzyl group
- Hands on experience in Boc-protection followed by ester reduction on proline intermediate.
- DMTr protection for various sugar moieties

Areas of expertise in multi-100 g scale

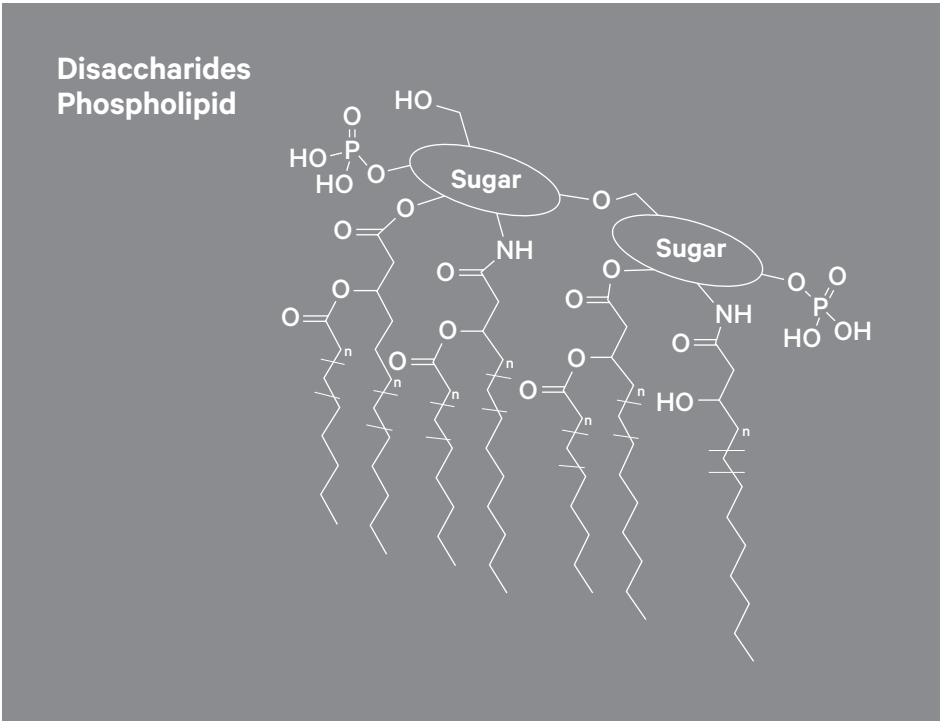
- Succinate opening with six-membered derivative on analogous intermediate
- Glycosylation with exclusive β-selectivity
- Hydrogenolysis of benzyl group

Lipids

Sai Life Sciences has experience in synthesizing a single category of lipids called Saccharolipids/ lipopolysaccharides. Lipids are a broad group of organic compounds which include fats, fat-soluble vitamins, mono, di-glycerides, and phospholipids. Functions of lipids include storing energy, signaling, and acting as a structural component of cell membranes.

Our Experience

- Developed low temperature crystallization for low melting lipid intermediates and implemented on multi-100 kg scale
- Implemented liquid-liquid extraction to purge the impurities and enhanced purity of lipid intermediates
- Established analytical method for in-process and intermediates of lipid intermediates using latest CAD technology across the synthesis



Sai

Make it
better
together

For more information
contact: **contact@sailife.com**