

The background features several thick, curved green lines that sweep across the slide, creating a sense of movement and flow. The lines vary in opacity, with some being solid green and others fading into the white background.

Interfacing bio-based industry requirements with bioeconomy education

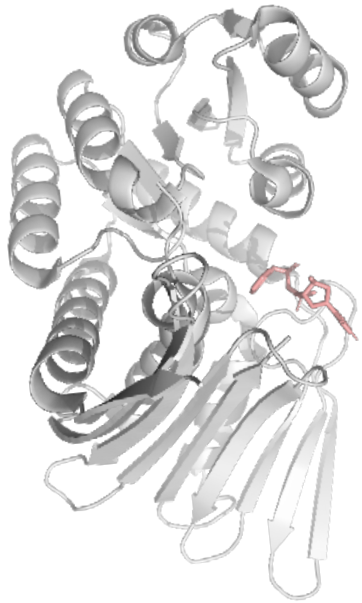
Stefan Lutz, Senior VP Research

November 16, 2020

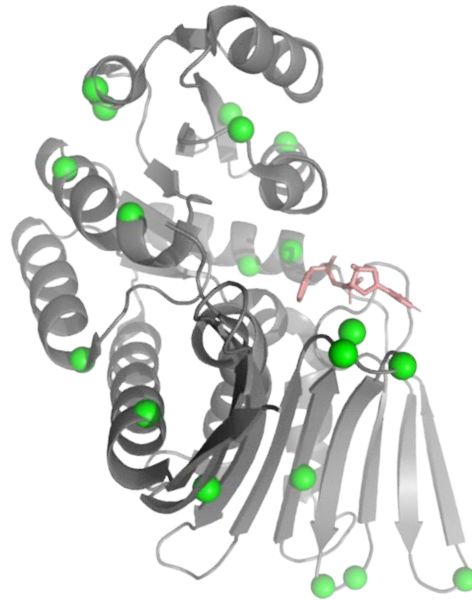
We engineer **enzymes** to improve health...
of people and the planet

Codexis Enzymes: Delivering the Promise of Synthetic Biology

Enzymes
from Nature



Commercially
Relevant Enzymes



● = Performance enhancing modification
(20^{x00} possible combinations)

Value
Creating
Products

Sustainable
Manufacturing

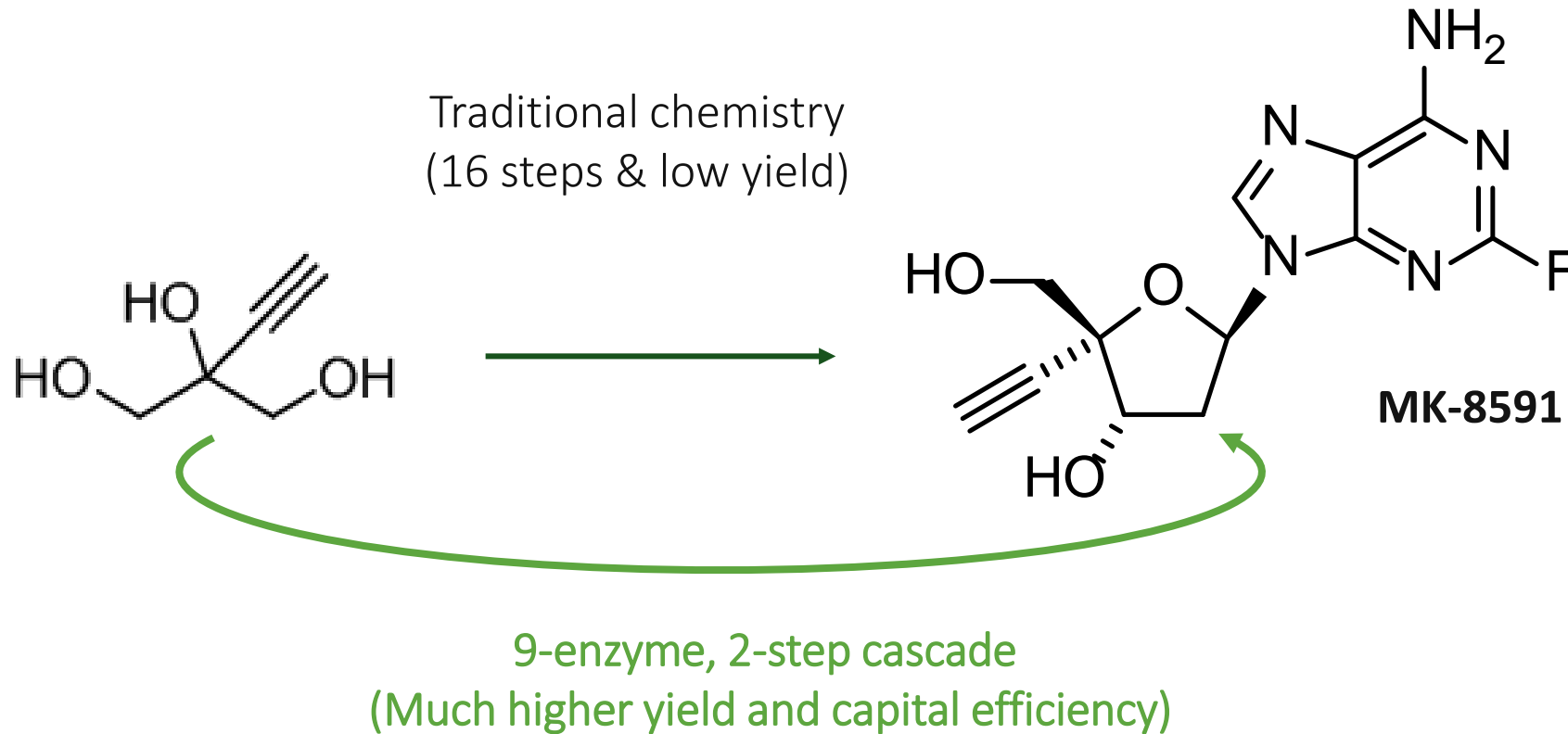
Precision Life
Sciences Products

Safe & Efficacious
Therapeutics

Islatravir Cascade: Sustainable Manufacturing Case Study

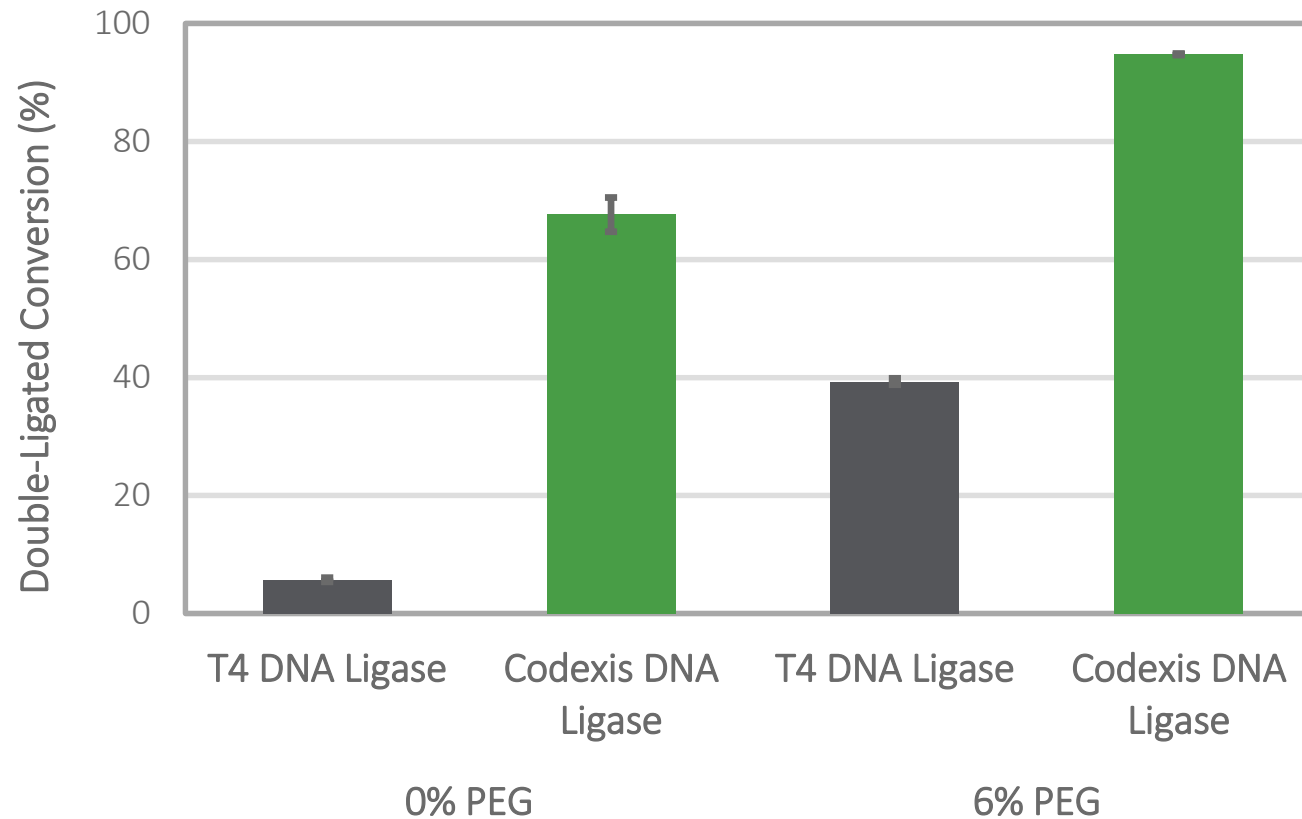
Enzyme cascade to antiviral drug candidate, islatravir

Efficient & sustainable synthesis of a complex molecule for the treatment of HIV



Engineered Ligase for NGS: Life Sciences Case Study

Improved Double-stranded DNA Ligase for Next Gen Sequencing:
A differentiated enzyme with optimized ligation efficiency to improve NGS workflows



Key reaction parameters
30-min ligation reaction with 30 ng input and a 20-fold molar excess of NGS adapter relative to input DNA.

Driving the bio-industry... an academic & industrial perspective

- Alignment of scientific ideation with sound business principles
 - Innovation & entrepreneurship courses
 - Forum for early-stage investors & pitch competitions
 - Start-up/accelerator programs
 - Entrepreneurs in residence
- Beyond expertise, execution & problem-solving skills
 - Effective communication skills
 - Team player & leadership (hard & soft skills)
 - Instill value of life-long learning

Contact Us

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