



# Aldehyde synthesis

You need an aldehyde as a final product or as an intermediate in your synthetic route? We have enzyme collections and the expertise to design biocatalytic routes to your favourite aldehyde – and to put it into practice

## BACKGROUND

The **volatility and reactivity of aldehydes is a curse** because their synthesis is challenging **and a blessing**: Aldehydes are applied as flavours and fragrances due to their volatility and characteristic olfactory properties. Aldehydes can undergo chemical transformations to numerous other functional groups. In short, the aldehyde is an invaluable chemical handle to make all sorts of products.

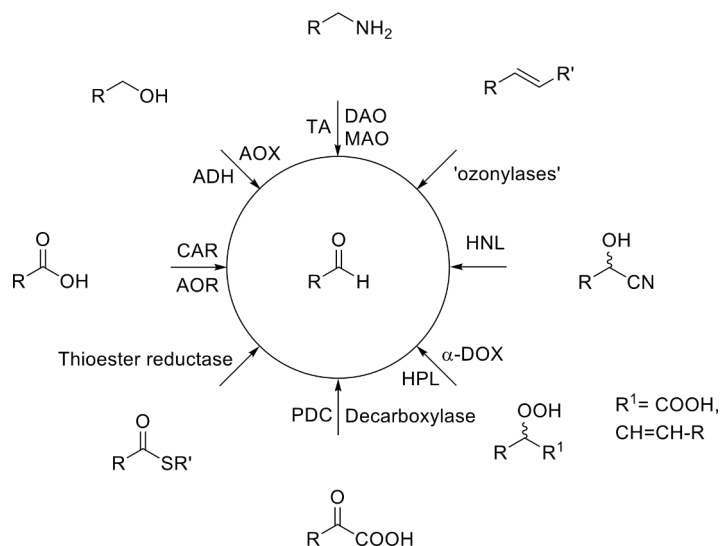
Nature is equipped with a portfolio of proteins with enzymatic activity to transform various precursor molecules to the respective aldehydes.

## TECHNOLOGY

We are strong in the discovery of novel enzymes, the optimization of expression and reaction engineering. In case the enzyme is not good enough for your purpose, we improve it by using customized high-throughput screening methodology. We also develop sophisticated enzymatic cascades and/or integrate the biocatalysts into suitable hosts for whole-cell biotransformations.

## OFFER

We provide professional strategies for the application of your choice under CDA/NDA protection.



## EXPERTS

- Dr. Margit Winkler
- Prof. Florian Rudroff
- Dr. Christoph Winkler
- Prof. Wolfgang Kroutil

## AVAILABLE FOR

- Joint Research Project
- Contract Research
- Investments
- Joint Applications for public funding

## DEVELOPMENT STATUS

Status of the project proposal – Technology Readiness Level 2-4

## KEYWORDS

- Aldehyde
- Flavour & Fragrance
- Enzyme collections
- Biocatalytic Synthesis
- Enzyme engineering
- Enzyme discovery

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