

5 of Top20  
Pharma Global

3 of Top10  
F&F Global

2 of Top10  
Agrotech Global

# NextGen Biocatalysts: KGOs

Fe(II)/ $\alpha$ -ketoglutarate dep. Oxygenases enable new reactions and products across industries.

Pharma

F&F

Agrotech

Fine Chemicals

Reaction  
profiles

Hydroxylation



Desaturation



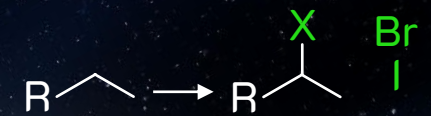
Epoxidation



Dealkylation



Special



**Complementarity.** More selective than UPOs, more active than P450s



**Bulk Availability.** Cost-efficient production in *E. coli* up to industrial kg quantities



**Proven scalability.** Demonstrated at 400kg production scale (Xiao 2025)



**Aminoverse promise.** No IP lock-in, no license fees nor royalties



# Tailored to your requirements

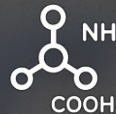
Our collection of **135 KGOs** was computationally curated to increase hit chances and minimize screening efforts:

## BioCarbon



- 38 wild type KGOs
- likely act on fatty acids, terpenes, alkaloids, steroids and similar substrates

## AminoAcid



- 42 wild type KGOs
- likely act on amino acids and similar substrates

## XNA



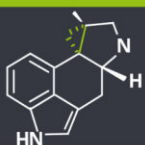
- 22 wild type KGOs
- likely act on nucleosides, nucleotides and similar substrates

## Eureka



- 41 wild type KGOs
- perform unique chemistry without evident substrate scope to other KGO panels

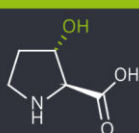
### Alkaloids



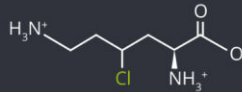
### Lactones



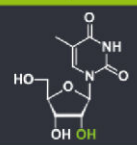
### trans-3-OH-L-Pro



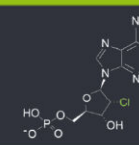
### 4-Cl-Lys



### 5-methyluridine



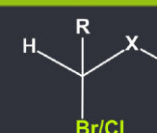
### Nucleo(s/t)ides



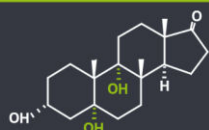
### Seq. Oxidation



### Halogenation



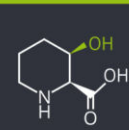
### Steroids



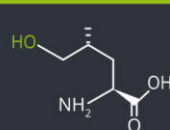
### Terpenes



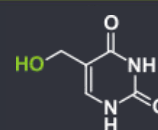
### cis-3-OH-L-Pip



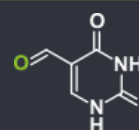
### 5-OH-Leu



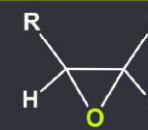
### Hydroxymethyluracil



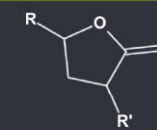
### 5-Formyluracil



### Epoxidation



### Ring formation



Find out more: [aminoverse.com](https://aminoverse.com)

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