

Amidase CLEA

- ***R. erythropolis* amidase**
- **Highly active and reusable**
- **Immobilized as Cross-Linked Enzyme Aggregate**



Amidase from *Rodococcus erythropolis* is a hydrolase that catalyzes the hydrolysis of amides to the corresponding acids, or vice versa. These important transformations are of big importance in many pharmaceutical and fine chemical pathways. The proprietary CLEA methodology has been applied to immobilize this enzyme.

CLEA Methodology

Our proprietary methodology to immobilize enzymes as Cross-Linked Enzyme Aggregates (CLEAs) consists of covalent cross linking of precipitated enzymes. This efficient and economically attractive method yields immobilized biocatalysts that do not include support material and therefore have a very high activity per unit volume.

Product Properties

Product Type:	Immobilized form of amidase from <i>Rodococcus erythropolis</i> as a Cross-Linked Enzyme Aggregate (CLEA)
Formulation:	Suspension in buffer
Enzyme Type:	amidase, amidohydrolase, acylase, EC 3.5.1.4
Natural Reaction:	Hydrolysis amides
Substrate Specificity:	aliphatic and aromatic amides
Typical activity:	50 units/ml*

* 1 unit will catalyse the hydrolysis of 1 μ mol benzamide at 40°C and pH 7.5

CLEA® is a registered trademark of CLEA Technologies BV.

Specific Product Specification

Amidase CLEA

Applications

Amidases are highly interesting for the synthesis of optically active amides or acids.

Storage and Stability

The amidase CLEA® is best stored in a cool and dry environment. Storage at 4 °C is recommended. It is recommended to keep the CLEA in suspension upon storage.

Formulations

Amidase CLEA is available as a suspension in buffer.

Pricing and Availability

Amidase CLEA is available in the formulations that are described before. The available quantities range from 10 kU to giga unit scale. Please inquire for availability, lead times and prices.

References

1. Sheldon, Roger A; Sorgedragger, Menno; Janssen, Michiel H. A. **Use of Cross-linked Enzyme aggregates (CLEAs) for performing biotransformations.** *Chimica oggi, Chemistry Today* 2007, 25(1), 48-52.
2. Sheldon, R. A; Schoevaart, R; Van Langen, L.M. **Cross-linked enzyme aggregates (CLEAs): A novel and versatile method for enzyme immobilization (a review).** *Biocatalysis and Biotransformation* 2005, 23(3/4), 141-147.
3. Sheldon, Roger A; Schoevaart, R; van Langen, Luuk M. **CLEAs: An effective technique for enzyme immobilization.** *Specialty Chem.* 2003, July/August, 40-42.
4. Cao, Linqiu; van Langen, Luuk; Sheldon, Roger A. **Immobilised enzymes: carrier-bound or carrier-free?** *Curr. Opin. Biotechnol.* 2003, 14, 387-394.