

Witozyme

A novel ketoreductase system

General Information

More than 300 different yeasts were isolated and screened for ketoreductase activity. After preliminary activity tests 11 candidates were selected for more detailed investigations and for selectivity screenings. These strains have been immobilized in order to increase their stability.

Why choose our ketoreductase system?

- The system works without co-factor addition, instead the cells regenerate their own co-factors.
- It is immobilized and stabilized, which means it's easy-to-use. It can be stored on room temperature, the separation from the reaction mixture can be done by filtration/centrifugation
- All strains used are wild types (not GMO)
- The systems described here achieve activity levels that compares with other commercially available brands
- In addition to the options presented here, hundreds are available in our collection
- We would also support your efforts in finding the best suitable ketoreductase system for your prochiral substrate

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Ketoreductase systems

Different immobilization techniques can be requested
(sol-gel, alginate)

Ketoreductase systems	Co-substrate
WY-1	2-propanol
WY-2	2-propanol
WY-3	2-propanol/Glucose
WY-4	2-propanol
WY-5	2-propanol
WY-6	2-propanol
WY-7	2-propanol
WY-10	Glucose
WY-11	2-propanol
WY-12	2-propanol
WY-13	2-propanol/Glucose

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Ketoreductase test screening procedure

1. Measure 50 mg of the ketoreductase product into an appropriate container
2. Add 5 ml of 100 mM phosphate-buffer (ph = 7.5)
3. Add 0,16 mmol of the chosen substrate
4. Finally add the appropriate cosubstrate (150 mg glucose or 0,1 ml 2-propanol) *
5. Shake on room temperature and track your reaction

Reaction work-up and analysis

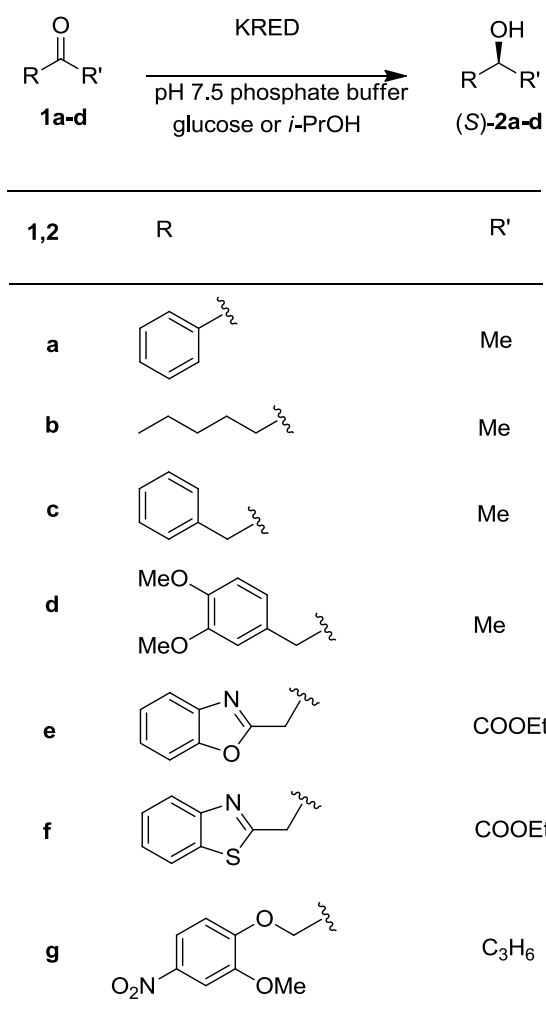
1. Use filtration or centrifugation to separate the immobilized ketoreductase system from the reaction mixture
2. Analyze the reaction mixture according to the chosen method

*The needed cosubstrate can be found in the Table on page 2

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Our reference substrates



For additional information, please contact us:

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