PRODUCT INFORMATION SHEET

IMMOBILIZED β -GALACTOSIDASE F7M # A5101

β-galactosidase from *Escherichia coli*.

β-galactosidase catalyzes the hydrolysis of β-D-galactoside to galactose and alcohol.

F7m: 1.0 mg β-galactosidase immobilized on polyvinyl ,
780 units immobilized per CR-column.
100 µl of a 5% lactose solution is digested to over 80% in 60 minutes

Nr.14 Storage buffer: 50 mM Tris/HCl, pH 7.8
add DTT to the storagebuffer, final concentration: 1 mM DTT

Nr.64 Reaction buffer: 50 mM phosphate, 1 mM $MgCl_2$, pH 7.8 add β-mercaptoethanol, to the reactionbuffer, final concentration: 10 mM

Nr.63 Washing buffer: 50 mM phosphate, 1 M NaCl, pH 7.8

Protocol

For more details see MoBiTec-CRC-Handbook.

1. Dilute delivered buffers (at least 2 ml each) with sterile doubly distilled water.
For 1 application you need
0.25 ml 10x reaction buffer and 2.25 ml doubly distilled water+ 10 mM β-mercaptoethanol
0.4 ml 5x washing buffer and 1.6 ml doubly distilled water
0.2 ml 10x storage buffer and 1.8 ml doubly distilled water+ DTT (1 mM)
The substrate should be in reaction buffer

2. Equilibrate the CR-column with 2 ml reaction buffer.
Fill 2 ml reaction buffer into a syringe, let the reaction buffer run through the column by gravity to the upper filter. In case the buffer runs very slowly, apply pressure by a syringe.

3. Load substrate solution in reaction buffer.
Small volumes (< 80 µl): spin the CR-column 5 seconds in a benchtop centrifuge (2000 rpm are sufficient). Let the substrate solution enter the matrix material.
Larger volumes: Let the substrate solution run through the column.
Flow-rate: up to 80 µl/minute
Keep the substrate in the column for about 1 minute at room temperature. Higher turn-over is obtained when the substrate is applied to the column again or incubated for longer times.

4. Elute the product solution.
Small volumes (< 80 µl): Elute the product with 500 µl reaction buffer.
Larger volumes: Let the substrate run through the column and elute the residual product solution with 500 µl reaction buffer.
It does not harm the columns if they run dry.

5. Wash the column with 2 ml washing buffer.

6. Equilibrate the column with 2 ml storage buffer.
Store the column at 4°C.
Never freeze a CR-column!

MoBiTec GmbH, Lotzestraße 22a, D-37083 Göttingen, Tel.: ++49 551-70 722- 0, Fax: ++49 551-70 722-22
E-mail: info@mobitec.de or order@mobitec.de, INTERNET: http://www.mobitec.de