

## Recombinant Enzyme Product Specification Sheet

|                                  |                                                                                           |
|----------------------------------|-------------------------------------------------------------------------------------------|
| <b>Cat. No.:</b>                 | PRO-E0128                                                                                 |
| <b>LOT:</b>                      | 2008-0128                                                                                 |
| <b>Activity:</b>                 | $\beta$ -Mannosidase                                                                      |
| <b>Synonyms:</b>                 | Mannanase, mannanase                                                                      |
| <b>Nomenclature:</b>             | Mannosidase, GH2                                                                          |
| <b>Source organism:</b>          | <i>Staphylococcus saprophyticus subsp. saprophyticus</i> ATCC 15305                       |
| <b>Enzyme Commission No.:</b>    | <a href="#">3.2.1.25</a>                                                                  |
| <b>Activity:</b>                 | -                                                                                         |
| <b>Specific activity:</b>        | -                                                                                         |
| <b>Purity:</b>                   | -                                                                                         |
| <b>Form and storage:</b>         | -                                                                                         |
| <b>pH optimum:</b>               | -                                                                                         |
| <b>Temperature optimum:</b>      | -                                                                                         |
| <b>[Protein]:</b>                | -                                                                                         |
| <b>Sequence length:</b>          | 366 amino acids ( <a href="#">view sequence</a> )                                         |
| <b>Accession No.:</b>            | <a href="#">BAE17243.1</a>                                                                |
| <b>Molecular weight:</b>         | 44196.0 Da (theoretical)                                                                  |
|                                  | - (observed by SDS-PAGE)                                                                  |
|                                  | - (observed by mass spectrometry)                                                         |
| <b>Biological function:</b>      | Hydrolysis of terminal, non-reducing $\beta$ -D-mannose residues in $\beta$ -D-mannosides |
| <b>Potential application(s):</b> | <a href="#">Biomass conversion</a> , <a href="#">carbohydrate research</a>                |
| <b>Comments:</b>                 | -                                                                                         |
| <b>Usage:</b>                    | -                                                                                         |
| <b>Assay:</b>                    | -                                                                                         |

**NOTE:** this product is currently under development. If you wish to prioritise the production of this enzyme, please follow [this link](#)

**Primary sequence:**

MNVIDLNGTWTNLNLTNTTRFHDMPVTIPGSIIVTGALENNLINHPYYGNNEAIQYLFNDHYSFSRFTTLETEVL  
MSEQILLNCEGLDTLATIFINHTNVLETDNMFRRYKFDIKPYVELGENIIEIQFYSPVQYLKEIKLQENGLAYL  
RKAQCMFGWDWGIKLPDFGIWKSIAIEYGDYMNIPFPLFTQTHHTQTVELNVRSKKAIDEATSLTCTLYDPNNQA  
IESITINNSHTFKHTFIIENPQLWWPIGYGEQPLYTVDVELYTGNQSIDHTSYSIGLRTVKLNRDNDGDASKFEF  
IINDTPVFIKGTNMIIEDAILTQSRRYSLTAQIKDCVRANINCIRVWEAP  
TTRQTFSLICAINTVF

**Literature:**

1. [Kuroda et al. \(2005\) Proc. Natl. Acad. Sci. USA \*\*102\*\*, 13272-13277](#)