



CERTIFICATE OF ANALYSIS

PRODUCT NAME: O-GLYCANASE™ (recombinant from *Streptococcus pneumoniae* expressed in *E. coli*)

PRODUCT CODE: GK80090

LOT NUMBER: DG53 046b

FORMULATION: A sterile-filtered solution in 20 mM Tris-HCl, 25 mM NaCl (pH 7.5)

STORAGE: Store enzyme at 2 - 8°C

PACK SIZE: 50 mU

FILL VOLUME: 40 µl

EXPIRATION: November 2018

QUALITY CONTROL

- | | | |
|----------------------------------|-----------|-----------------------------------|
| 1. Activity ¹ : | Passed | (Specification: ≥1.25 U/ml) |
| 2. Specific activity: | 29.7 U/mg | |
| 3. Protease assay ² : | Passed | (Specification: “Not Detectable”) |
| 4. Contaminants ³ : | Passed | (Specification: ≤0.005%) |

Authorized Signature

- One unit is defined as the amount of enzyme required to catalyze the release of 1 µmole of p-nitrophenol from Gal β(1-3) GalNAc α-pNP per minute at pH 5.5 and 37°C.
- No protease activity was detectable after incubation of the enzyme with 0.2 mg resorufin-labeled casein for ~18 hours at 37°C based on Schickaneder E, Hösel W, von der Eltz H, Geuß U. Casein-resorufin, a new substrate for a highly sensitive protease assay. Fresenius Z. Anal Chem. 1988 330:360.
- The absence of exoglycosidase contaminants was confirmed by extended incubations with the corresponding pNP-glycosides: α-fucosidase, β-fucosidase, α-mannosidase, β-mannosidase, α-N-acetylgalactosaminidase, β-N-acetylhexosaminidase, α-galactosidase, β-galactosidase, α-glucosidase, β-glucosidase and β-xylosidase. The product was tested for contaminating sialidase by extended incubation with MU-NANA.