Certificate of Stability

Ludger Ltd LZ-CERHM-KIT

Stability Question

What is the enzyme activity of Ceramide Glycanase (CER) when exposed to higher ambient temperatures for a prolonged period of time?

Stability Trial

Vials of Ceramide Glycanase were subjected to 37˚C, room temperature and 4°C for up to 14 days. Each of these enzymes was then used to digest GM1 to ascertain enzyme functionality. The enzyme-released glycan from GM1 was fluorophore labelled and detected using a HPLC fitted with a fluorometer. The presence of a fluorescent signal at 23 minutes indicates released glycan and hence, active enzyme.

Stability Outcome.

Ceramide Glycanase remains functional after 14 days incubation at either 37˚C, room temperature or at 4°C (Figure1).

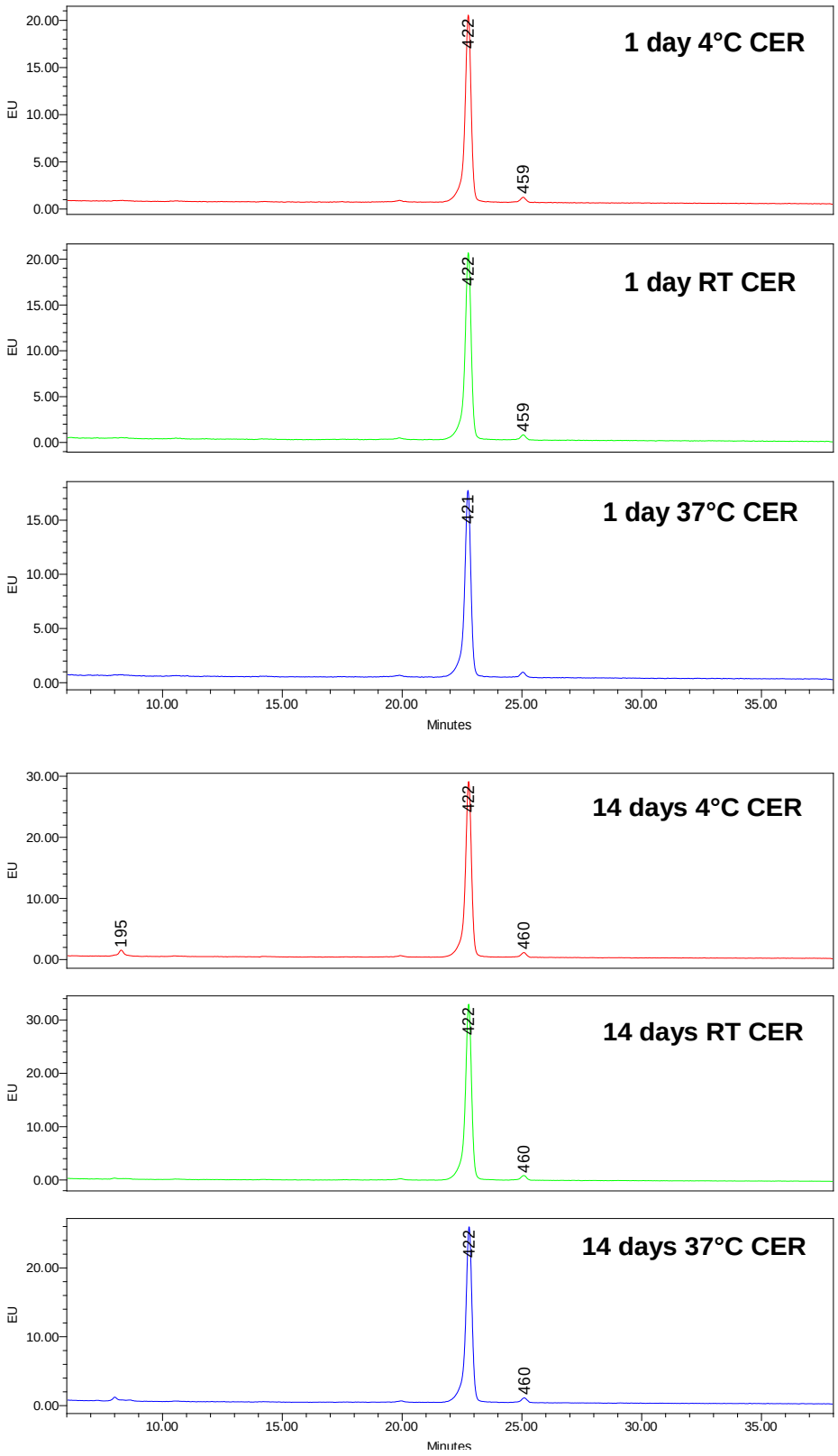

Figure 1: Comparison of activity of Ceramide Glycanase subjected to three storage conditions (37˚C, room temperature and 4°C) for 1 day and 14 days. Ceramide Glycanase-digested GM1 samples were 2AB-labelled and T1 purified before running on a Waters 2795 HPLC equipped with a LudgerSep N2 column. The peak at 23 minutes correlates with released glycan from the GM1 molecule.