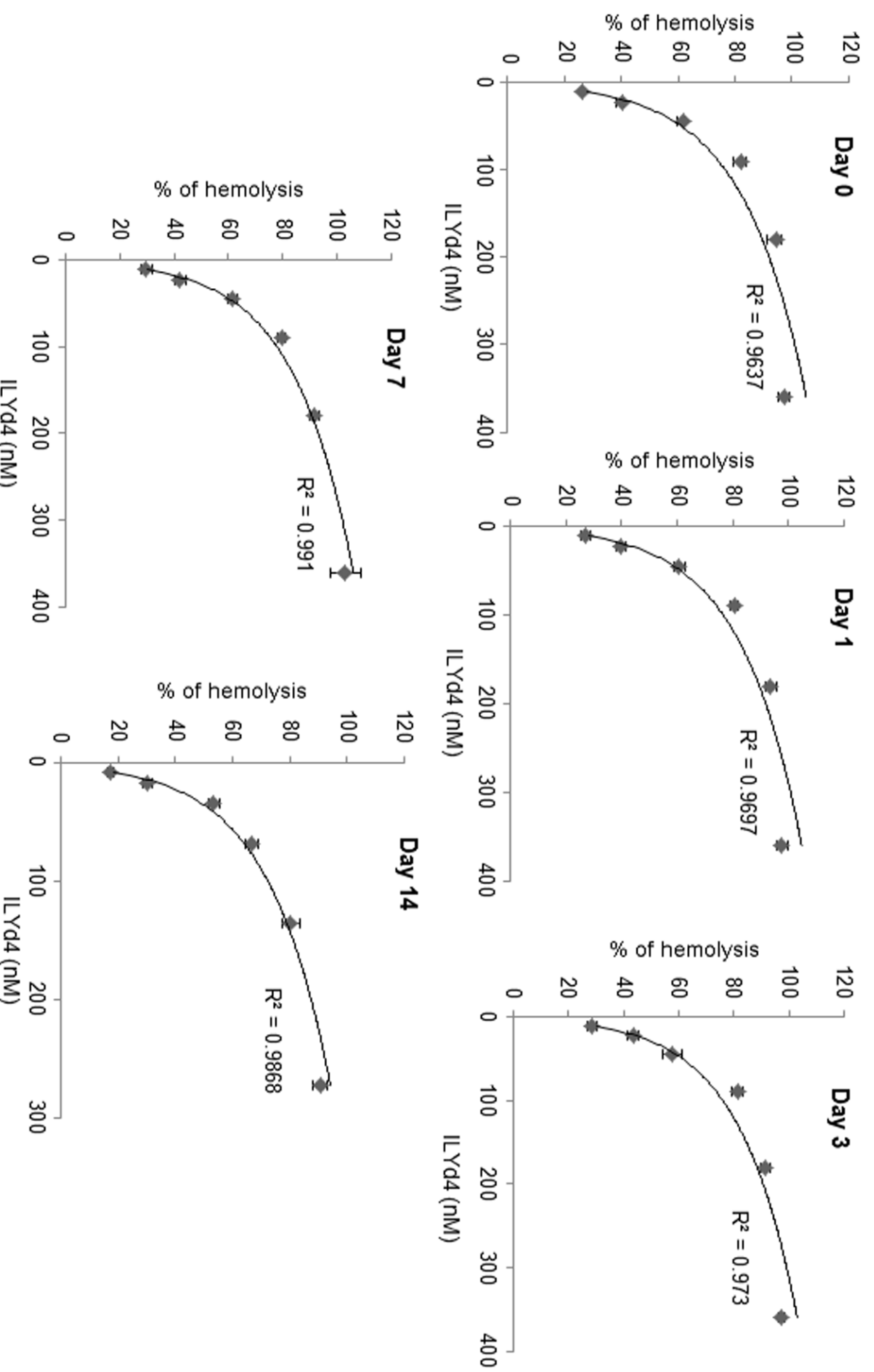


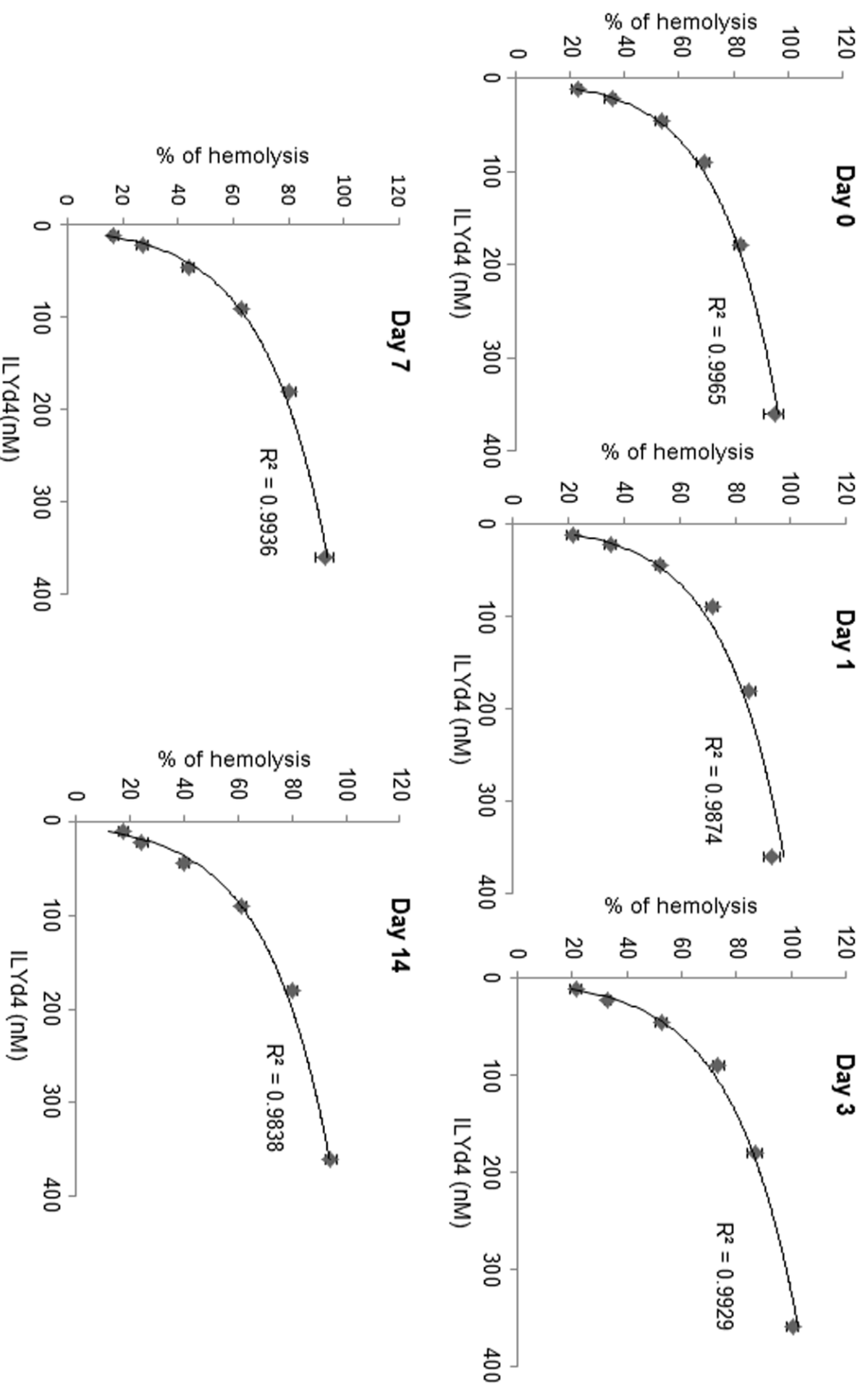
Supplemental Figure 1: The purity of tag-free (upper panel) and His-tagged ILYd4 (lower panel) analyzed by C8 RP-HPLC.

## Tag-free ILYd4 25°C

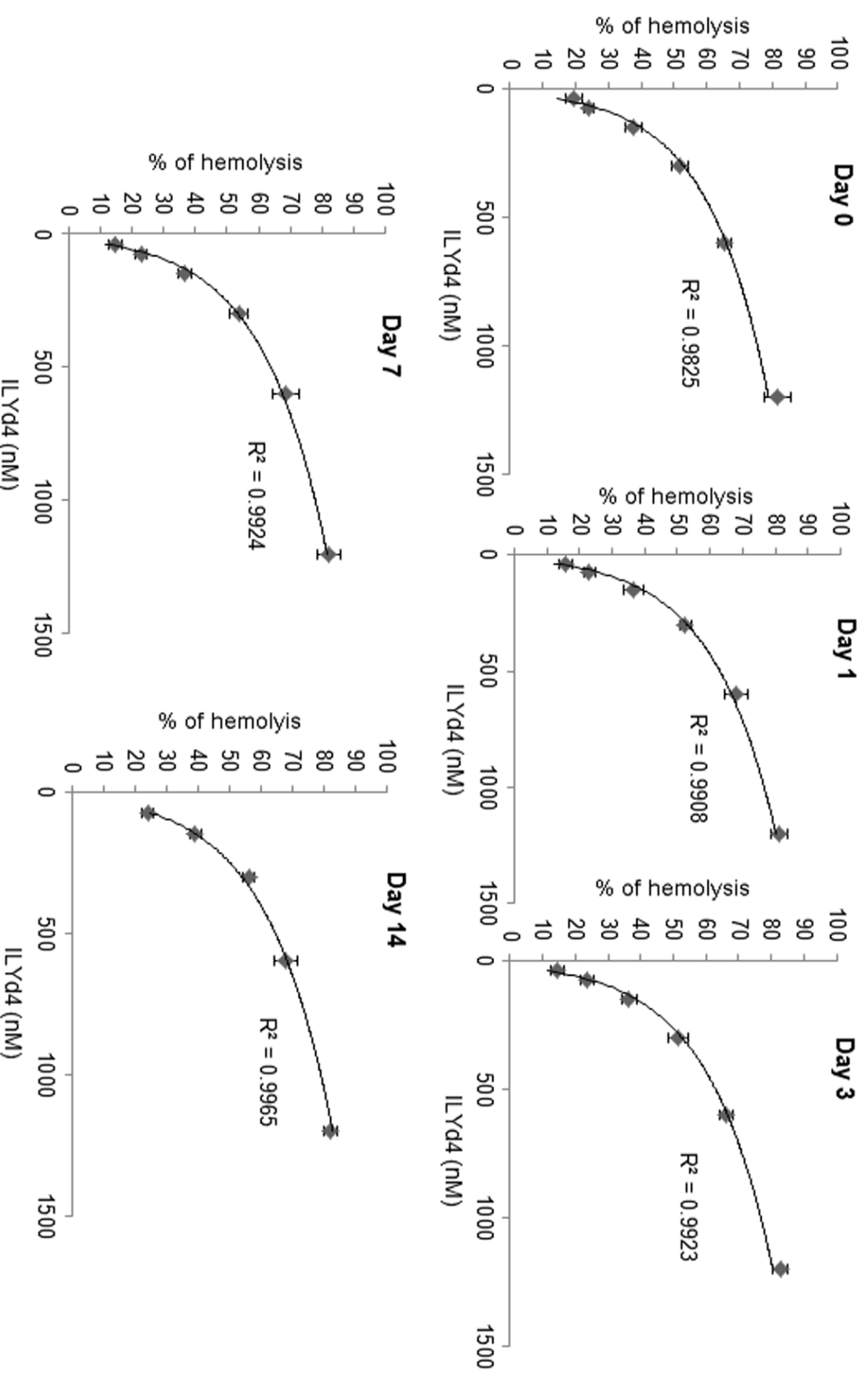


**Supplemental Figure 2: Anti-hCD59 activity of the tag-free ILYd4 stored at 25° C over different time periods was assessed by complement-mediated assays on human erythrocytes. Results are mean  $\pm$  SD of three independent experiments.**

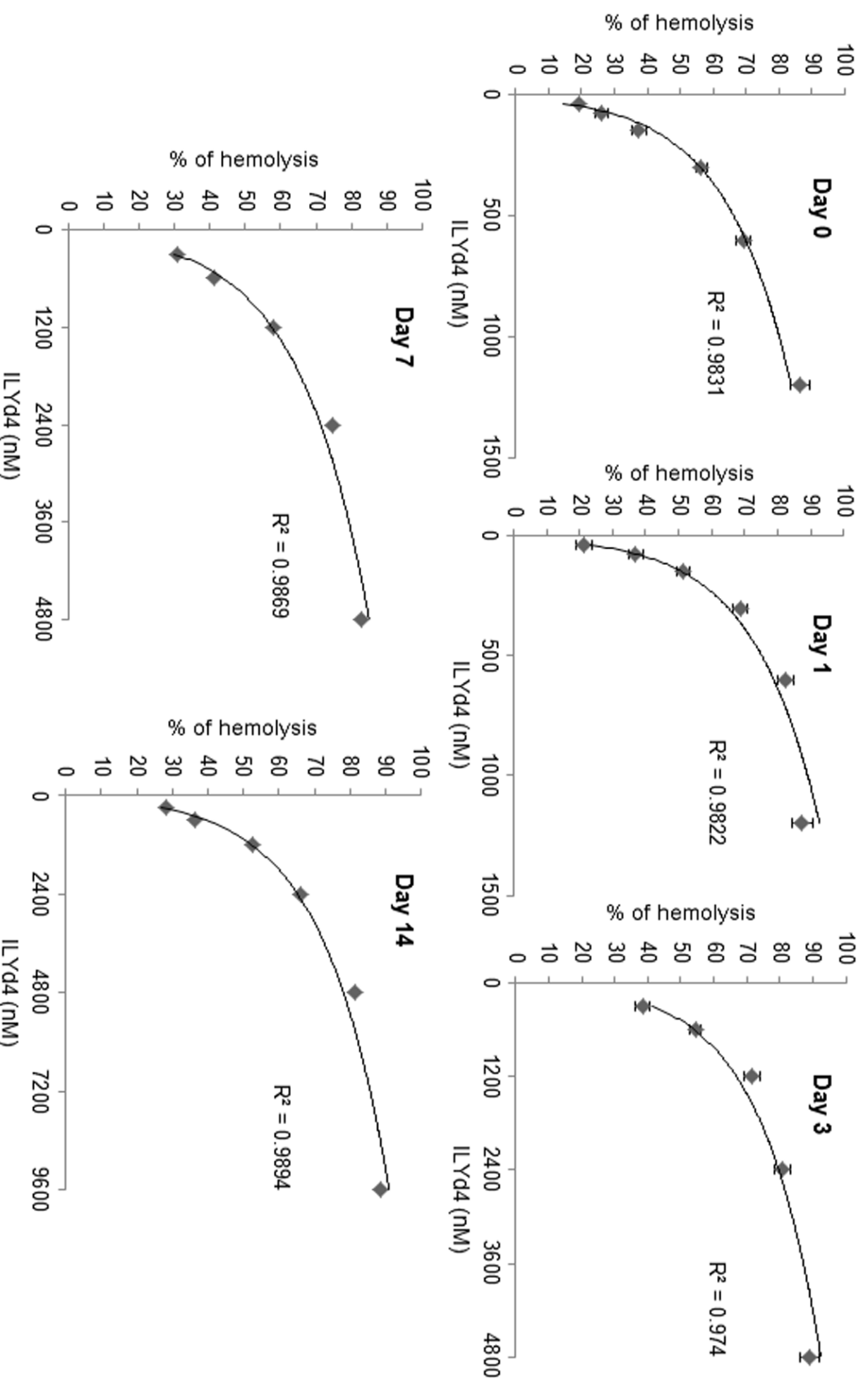
## Tag-free ILYd4 40°C



**Supplemental Figure 3: Anti-hCd59 activity of the tag-free ILYd4 stored at 40°C over different time periods was assessed by complement-mediated assays on human erythrocytes. Results are mean  $\pm$  SD of three independent experiments.**



**Supplemental Figure 4: Anti-hCD59 activity of the His-tagged ILYd4 stored at 25° C over different time periods was assessed by complement-mediated assays on human erythrocytes. Results are mean  $\pm$  SD of three independent experiments.**

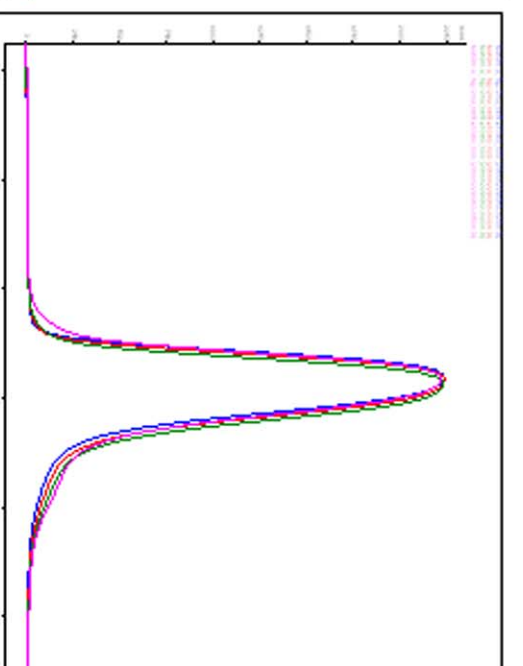
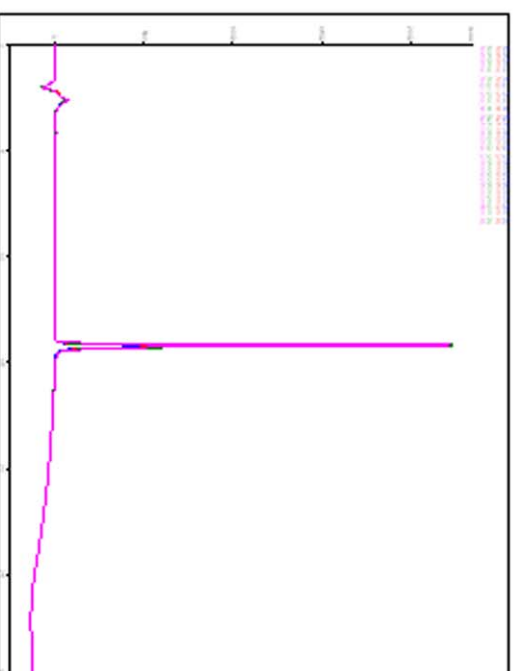
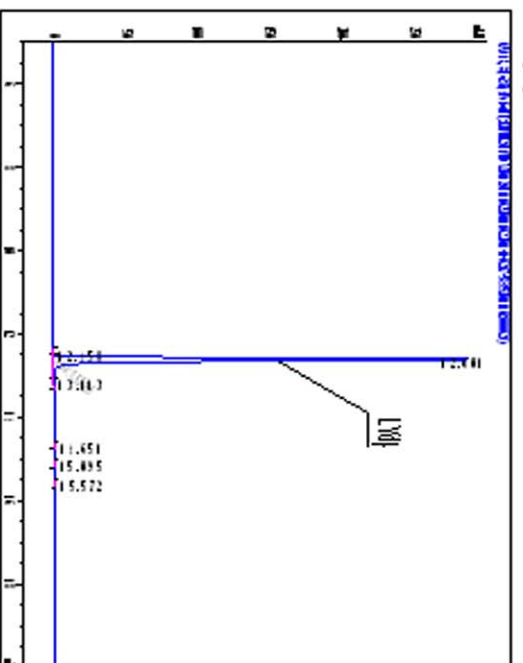


**Supplemental Figure 5: Anti-hCD59 activity of the His-tagged ILYd4 stored at 40° C over different time periods was assessed by complement-mediated assays on human erythrocytes. Results are mean  $\pm$  SD of three independent experiments.**

# Supplemental Figure 6

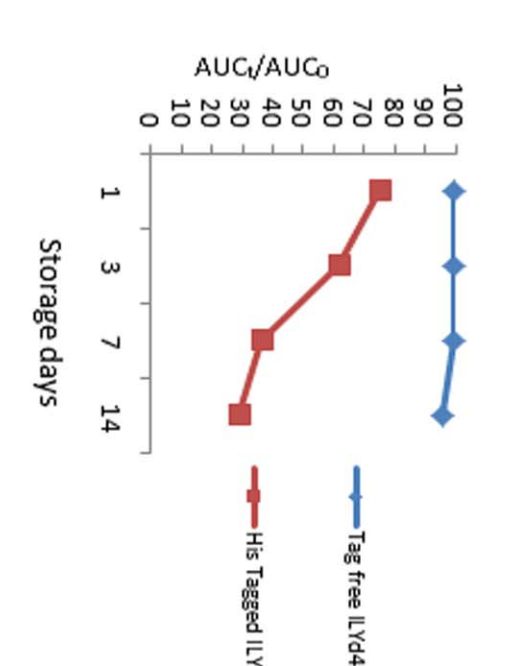
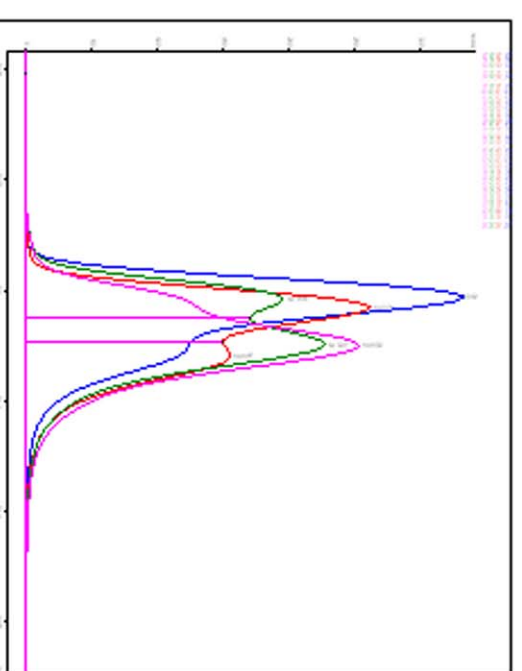
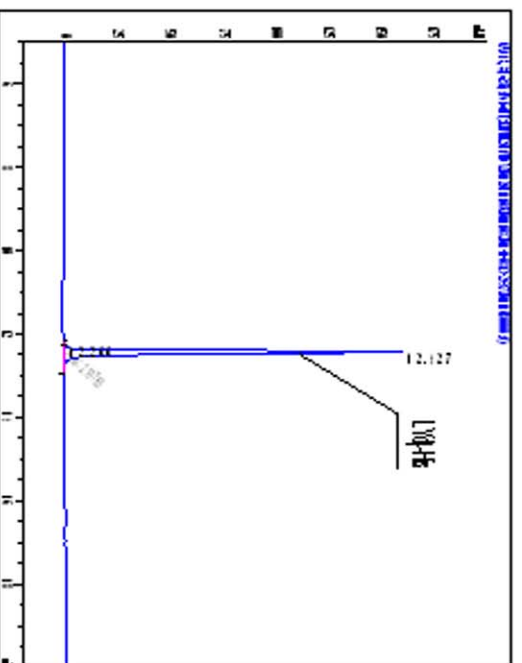
A

Tag-free ILVd4 under 40°C



B

His-tagged ILVd4 under 40°C



C

**Supplemental Figure 6: RP-HPLC analysis demonstrates that there is a time-dependent reduction in the size of the monomer peak and a concomitant increase in the size and retention time of the aggregated His-tagged ILVd4 stored at 40°C for 14 days.** A. Left panel shows the original peak of tag-free ILVd4 at day 0. Middle panel shows no changes for the original peak of tag-free ILVd4 over time. Right panel shows a zoom-in of the peak in the middle panel. Blue, red, green and purple curves in the right panel represent the tracings on days 1, 3, 7, and 14 respectively. B. Left panel shows the original peak of His-tagged ILVd4 at day 1. Right panel shows time-dependent decrease in the size of the original peak and a time-dependent increase in the retention time. Blue, red, green and purple curves in the right panel represent the tracings on days 1, 3, 7, and 14, respectively. C. The time-dependent analysis of the area under the curve (AUC) for the monomer peak over times. The time-dependent reduction in the AUC was calculated in the following manner: (the AUC for the monomer peak at day 0 (AUC<sub>0</sub>) - the AUC at days 1, 3, 7, or 14 (AUC<sub>t</sub>)) / AUC<sub>0</sub> X 100%.