

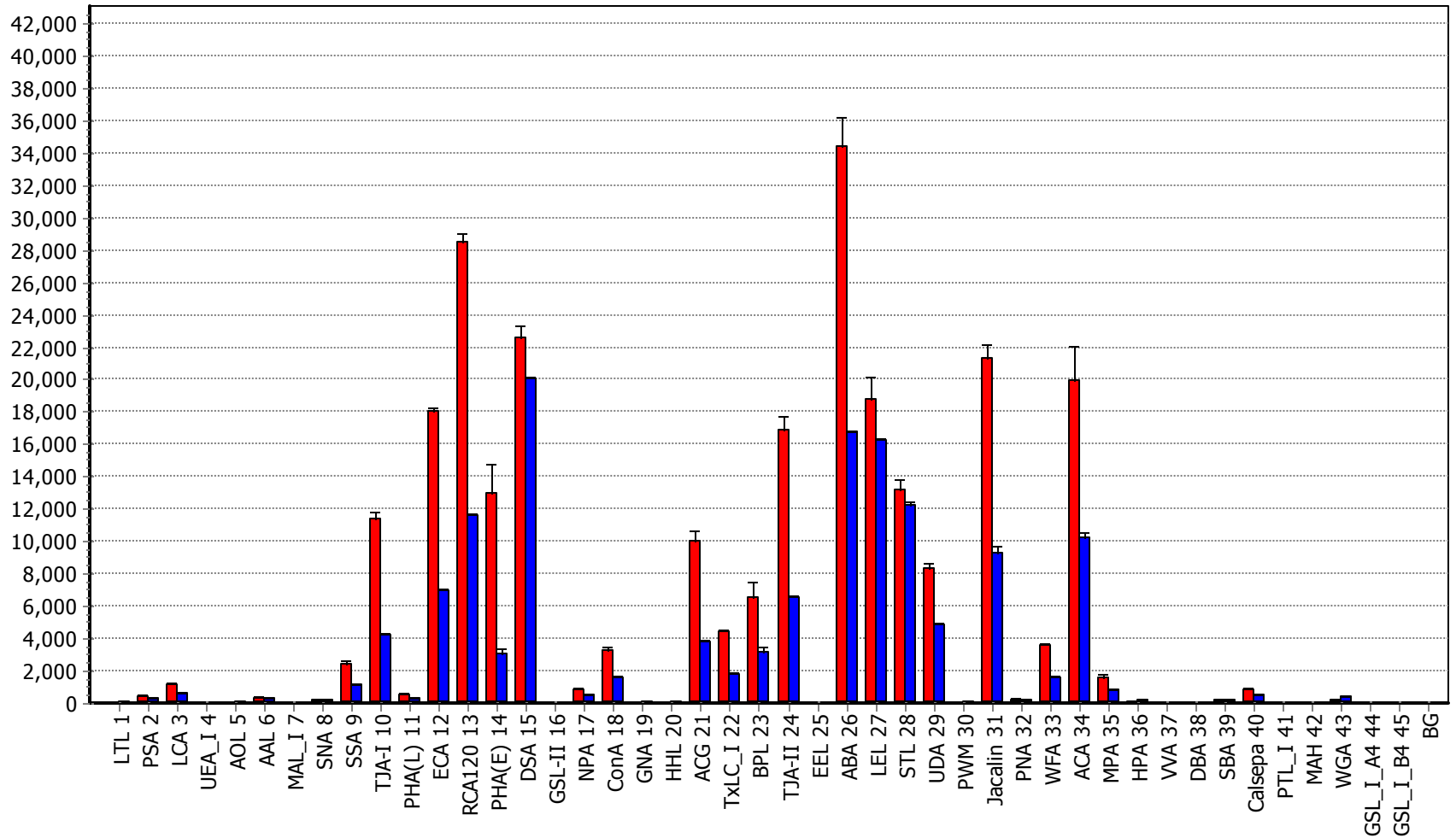
Comparison between GSR 1200 and GenePix 4000B

GlycoTechnica Ltd.

GSR vs. GenePix

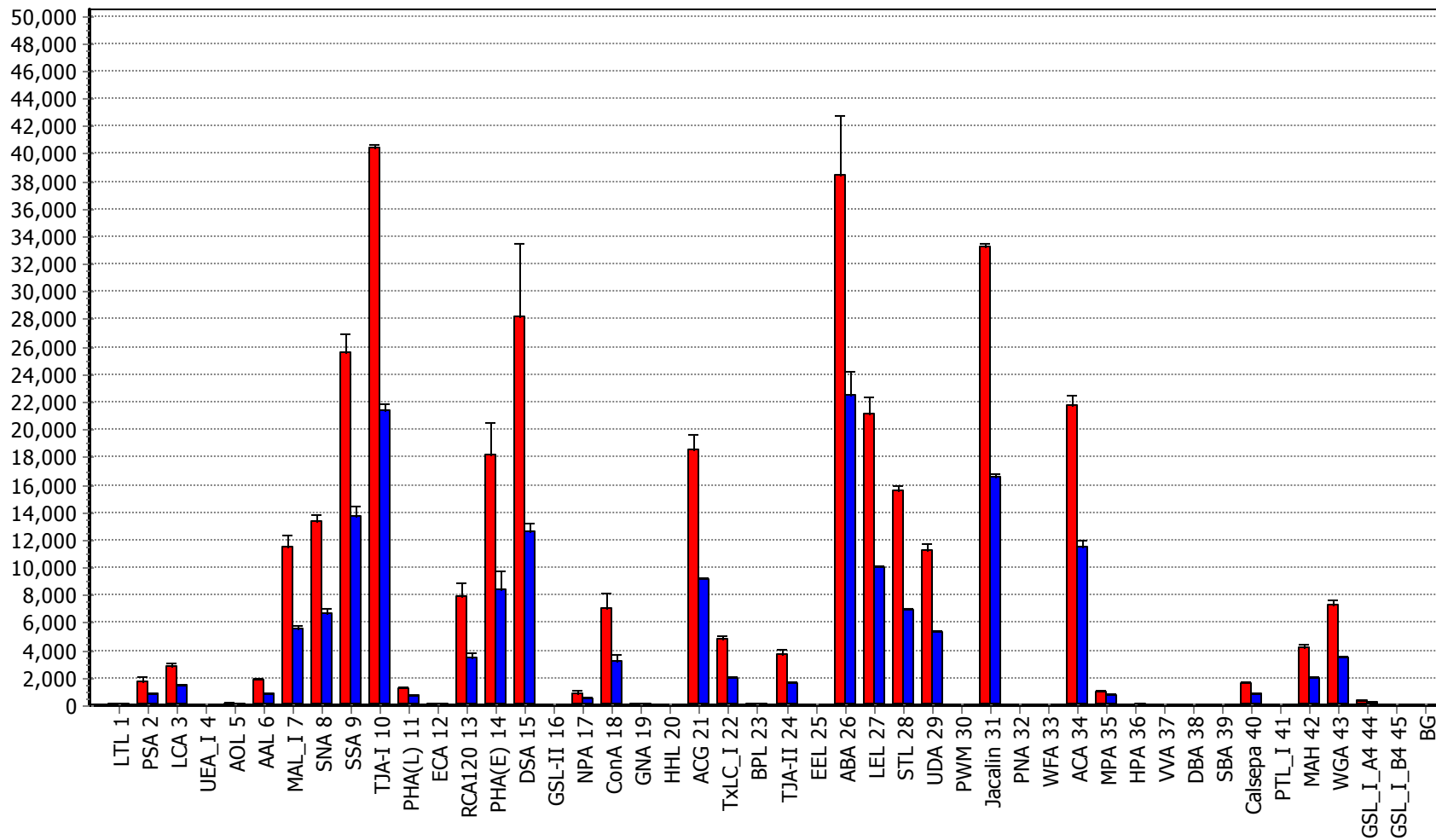
- FET, ASF and Cell Lysate were used as samples in this comparison
- (Background)BG signal intensities were adjusted at the same level to compare the sensitivity. In other words, we compared the performance emphasizing the importance of S/N ratios
- A conventional washing and Drying out protocol was used.
- **As a result, it is clear that GSR has higher sensitivity than GenePix**

■ ASF GSR E199 G105 2well ■ ASF GenePix G380 2well

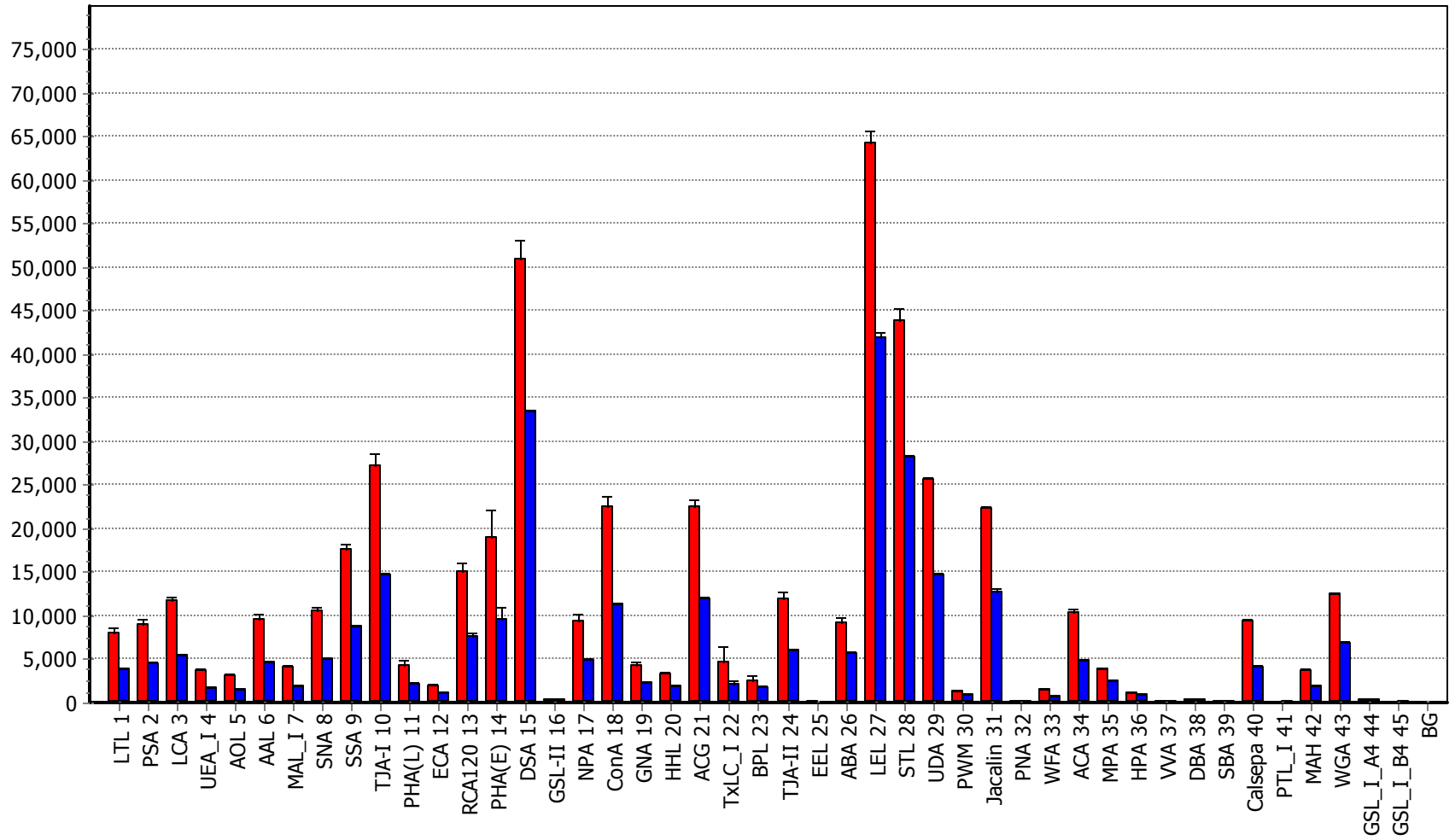


E199 means exposure time by msec, G105 means Gain=105, 2well means No.2 Well on LecChip

■ FET GSR E199 G105 6well ■ FET GenePix G380 6well



■ CELL GSR E199 G105 4well ■ CELL GenePix G380 4well



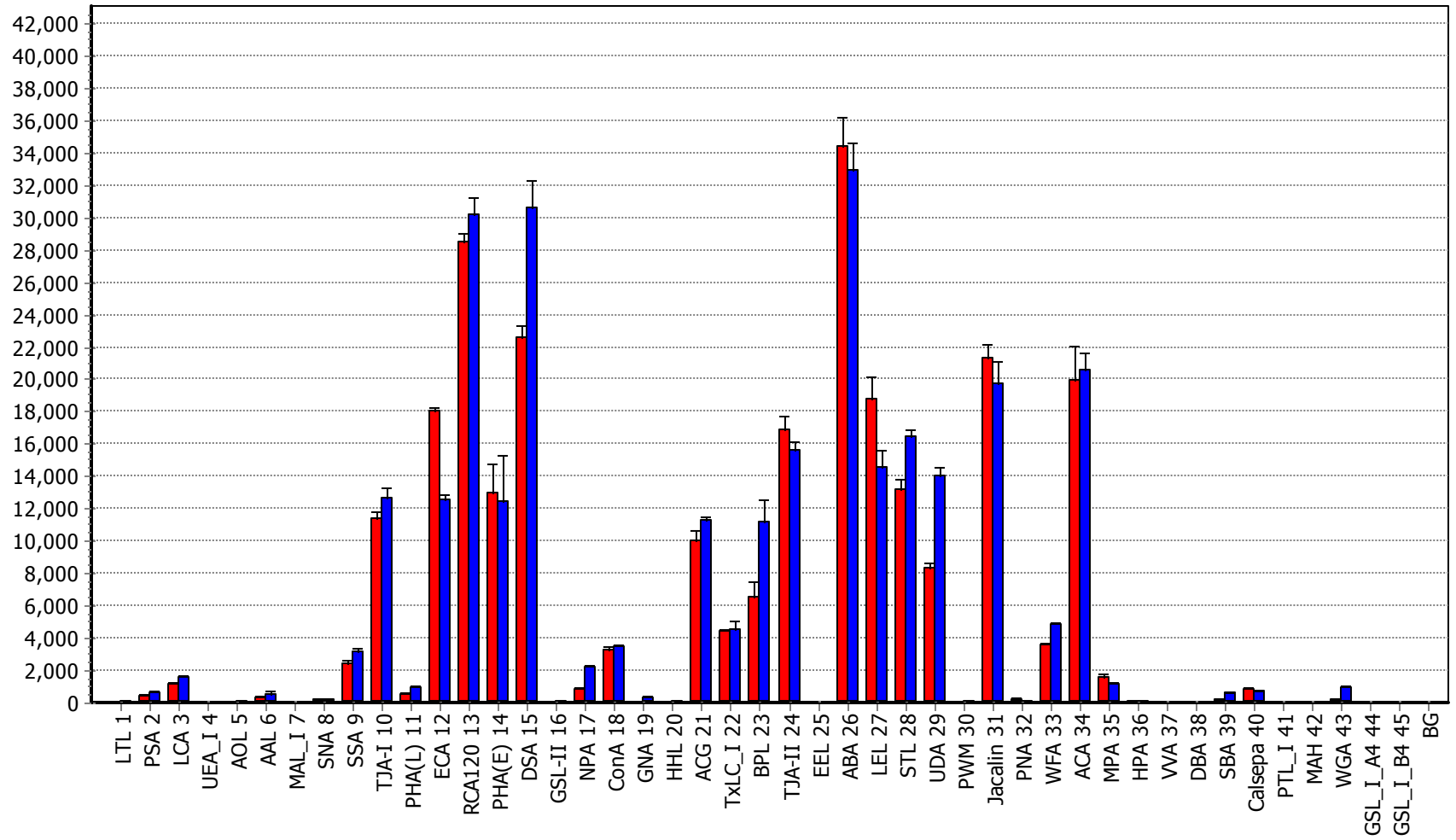
Comparison between With Wash and Without Wash

- GenePix can not take fluorescence images directly from a liquid phase without washing and drying up the slide glass surface. GSR is the only scanner which is able to detect fluorescence signals without washing.
- Two gains were used, 105 and 125.
- The same sample set was used in this comparison.
- It is clearly shown that the signal intensities drops with washing, especially for weak interactions. In other words, GSR has higher performance in terms of qualitative measurement.

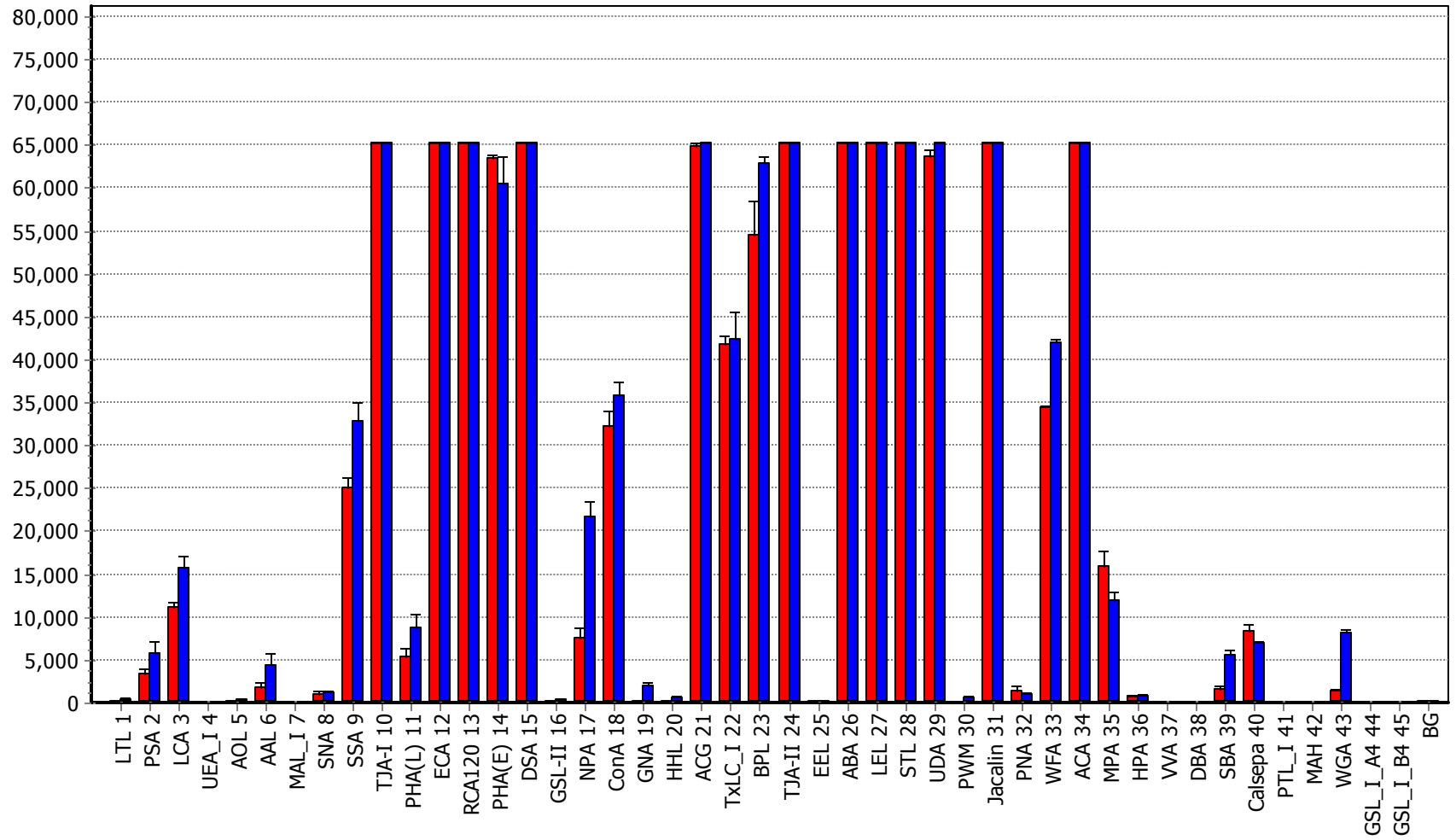
Cont.

- Multivalent interactions could reduce the decrease of signal intensities due to the washing. ASF and FET have multivalent interactions.
- A paper written by Uchiyama et al. using LecChips and GSR 1200 must be a good paper in this point. *Proteomics* 2008, 8, pp3042-3050, <http://www.ncbi.nlm.nih.gov/pubmed/18615430>
- **Totally speaking, it is clear that GSR 1200 is the best scanner to monitor weak Lectin-Glycan interactions.**

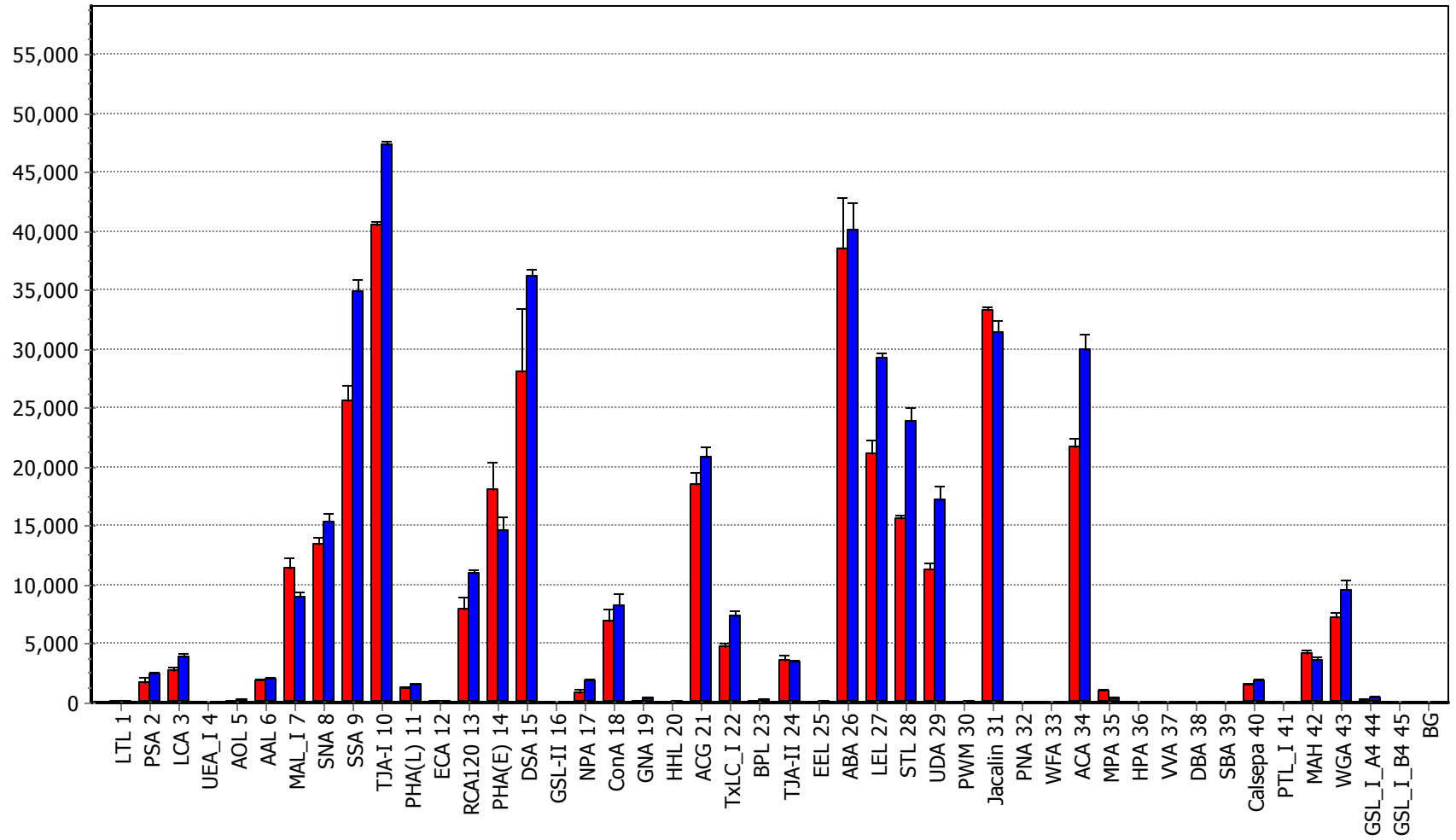
■ ASF GSR Dry E199 G105 2well ■ ASF GSR Wet E199 G105 2well



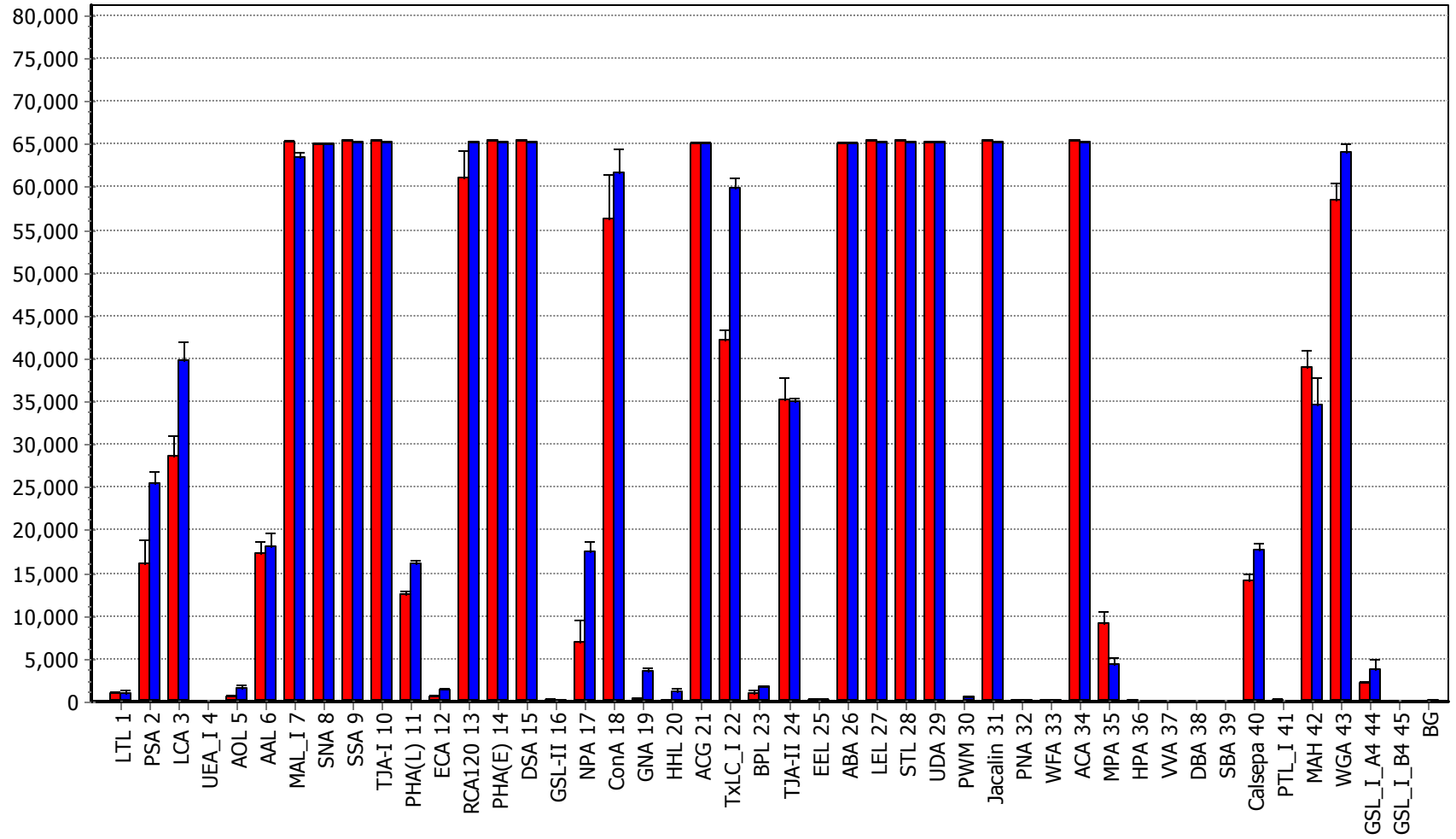
■ ASF GSR Dry E199 G125 2well ■ ASF GSR Wet E199 G125 2well



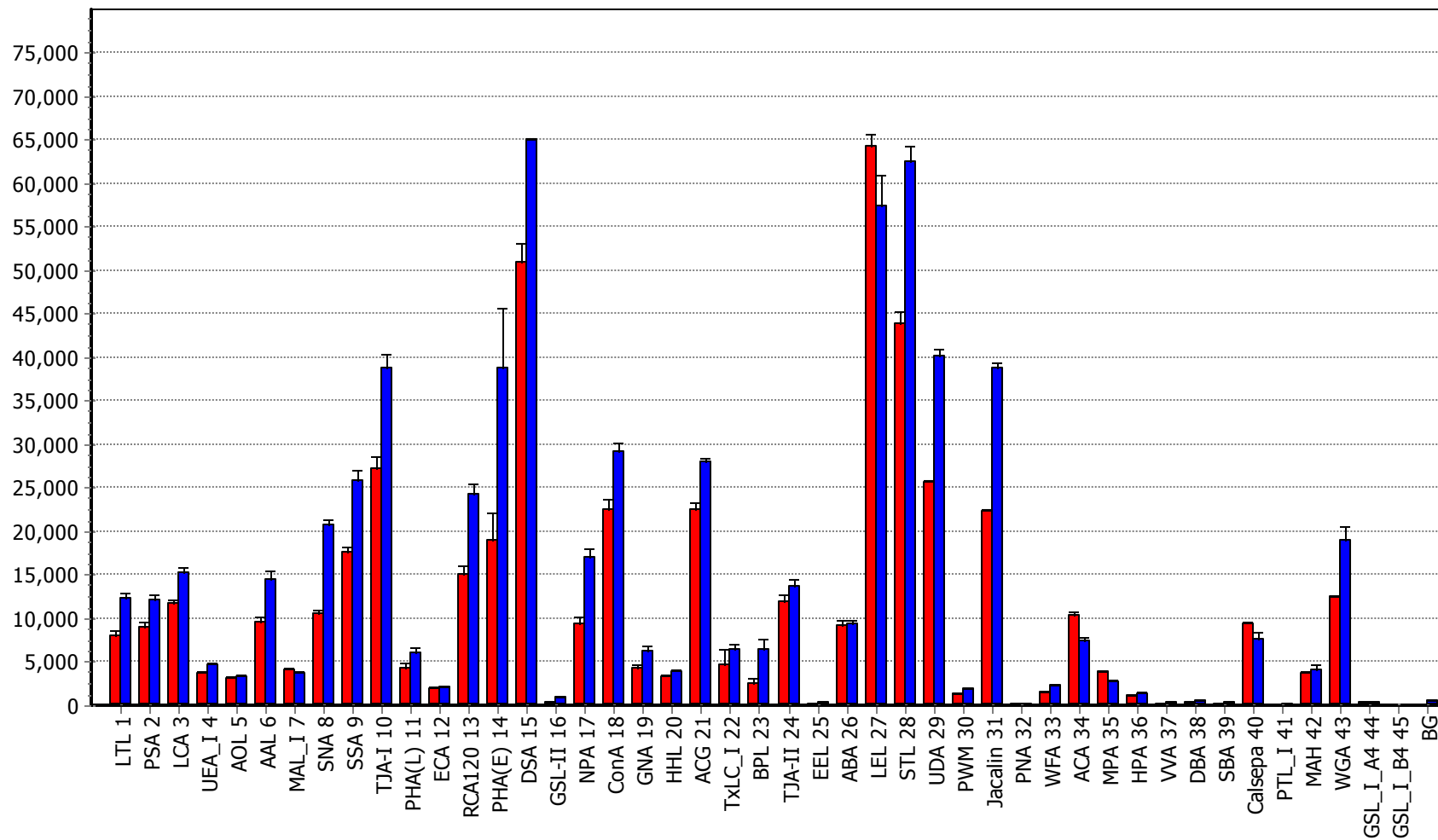
■ FET GSR Dry E199 G105 6well ■ FET GSR Wet E199 G105 6well



■ FET GSR Dry E199 G125 6well ■ FET GSR Wet E199 G125 6well



■ CELL GSR Dry E199 G105 4well ■ CELL GSR Wet E199 G105 4well



■ CELL GSR Dry E199 G125 4well ■ CELL GSR Wet E199 G125 4well

