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TIME FOR IMMUNOASSAYS

Belysa[®] Immunoassay Curve Fitting Software Update (Version 1.2)

We are pleased to announce the second update for our Belysa[®] Immunoassay Curve Fitting Software (Cat. No. 40-122). This program contains tools that allow you to interpolate data and evaluate your assays for consistency within both the single plate and over the course of a multi-assay study. Discover more information at **SigmaAldrich.com/belysa**.

The new update consists of feature updates and bug fixes suggested by our users. The two key feature updates are the addition of competitive assay curve interpolation and added flexibility to the LoD calculation.

Existing users may download this new version from **SigmaAldrich.com/belysa-updates**.

Key Updates

Competitive Assay Curve Fitting

Competitive assays present the inverse of a standard sandwich assay with the highest detected signal (e.g., O.D. or MFI) being associated with the lowest value on the curve (e.g., the blank). Belysa[®] software will now plot this with the same ease as users experience with more traditional quantitative assay formats including metrics such as LoD and LLoQ.

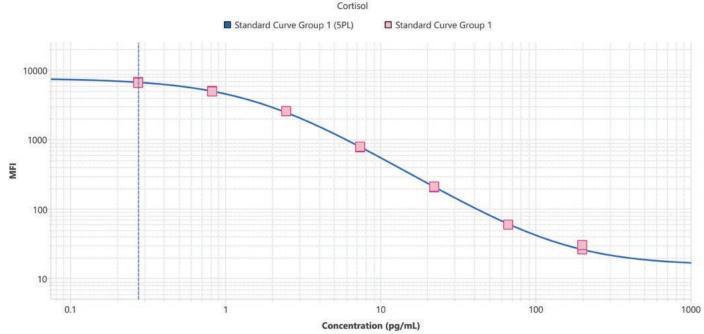


Figure 1. Example of competitive assay curve fitting looking at cortisol levels using a MILLIPLEX® multiplex assay (Cat. No. MSHMAG-54K).



LoD Calculation

The Standard Deviation Coefficient has been updated within the Analysis menu so users can set their own value. This adds to Belysa® software's flexibility and customizable nature to suit individual laboratory requirements.

Display Analysis	Analysis	
Auto-Flag Reports Logging	LLoQ Calculation	
	Recovery Bias: 20% 💠 CV Limit: 20% 💠	
	LoD and MDD Calculation LoD Coefficient: 2.5 \$ MDD Coefficient: 2.5 \$	
	Results Table	
	Show Results Below LoD Display Units in Results Table	

Figure 2. The Analysis tab with the addition of a flexible LoD coefficient.

Other Updates

MDD Interpolation:

The MDD will now interpolate against the standard curve of the assay. Previously this was a linear interpolation.

LLoQ Line:

This has been removed from output reports by request.

Flags:

Warning flag definitions have been added to the Excel Output file.

MacOS (Beta):

A macOS compatible version of Belysa[®] software, unlocked via the same USB Security dongle, released as a Beta version pending license enablement. Users may see a warning pop up. Full version expected in late 2022.

Bug Fixes:

- Increased performance when pasting well data into plate table.
- Increased precision on curve fit parameters displayed in equation to assist hand-checking results.
- Increased Unknown Dilution Factor limit.
- Fixed issue where external curve LLoQ did not update when LLoQ criteria changed.
- Fixed issue where Sample ID was not shown in curve point callout.

Download this update at SigmaAldrich.com/belysa-updates

Learn more at SigmaAldrich.com/belysa

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