BrightBox QUANTITATION

EdgeBio

BrightBox Quantitation Assay

The BrightBox Assay is a novel method to quantitate your NGS libraries

Library quantitation can be a lengthy, costly, and inaccurate process where variability can lead to unequal library loading and waste time and money.

The BrightBox Assay is a quick and simple method to accurately quantitate any NGS library.

Get results quickly by shortening your current library preparation and instrument loading workflows.

Why Use BrightBox

✔ **FAST**
Save time with reactions done in just 5 minutes.

✔ **EASY**
Reduce manual errors and save time with premade Assay Mix and prediluted standards kept in refrigerated storage.

✔ **ACCURATE**
Improve data with consistent pooling based on actual molarity.

✔ **FLEXIBLE**
Quantitate any library with attached P5 and P7 adapters.

Faster than current workflows. Preparation and incubation times for the BrightBox assay take a fraction of the time required for other methods.

BrightBox
- Aliquot Assay Mix
- Add Libraries
- Incubate and read - 5 minutes!

15 minutes

26 libraries per 96 well-plate

Mass Analysis
- Mix Library with Dve
- Load one sample at a time onto Qubit

25 minutes

16 libraries

Fragment Analysis
- Estimate Mass - 1 hour
- Dilute Library
- Prime
- Run on instrument - 1 hour

2 hours

11 - 96 libraries

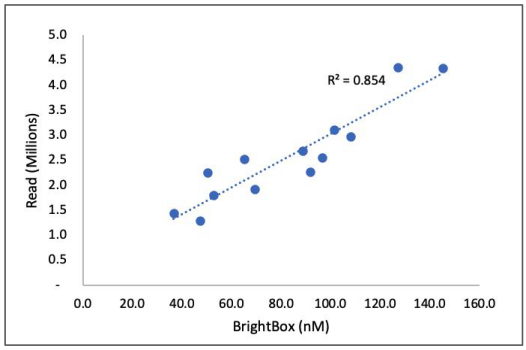
qPCR
- Dilute Libraries - 1 hour
- Thaw Master Mix
- Assemble Master Mix
- Aliquot Master Mix
- Add Libraries
- Cycle and read - 1 hour

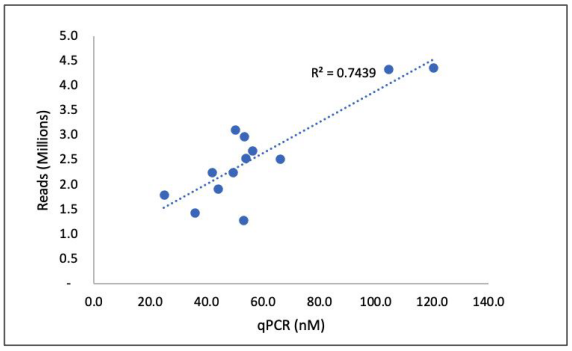
2.5 hours

12 libraries per 96 well-plate

Quantitation is correlated to read numbers.

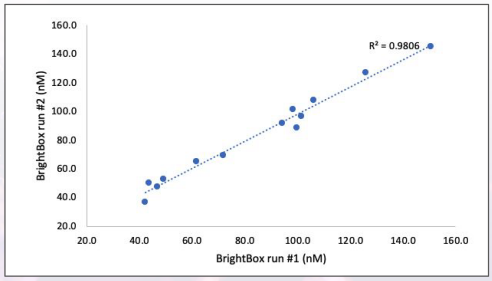
Molarity was calculated for 13 libraries with the BrightBox assay and a commonly used qPCR library quantitation kit . Equal volumes of each library were loaded onto a MiSeq and read numbers were plotted against calculated molarity.





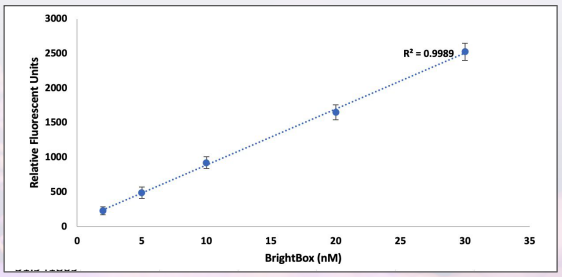
Reproducible results.

16 different libraries were repeatedly run using the BrightBox assay on a qPCR instrument.



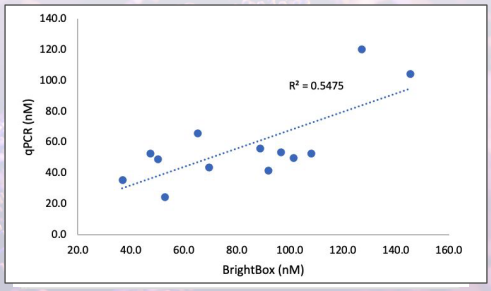
Quantitation is linear and reproducible.

Standards from the BrightBox kit were run 12 different times on a qPCR instrument and show high linearity and low variability.



Correlation between methods.

16 different libraries were quantitated with the BrightBox assay and a qPCR library quantitation kit. Outlying points are due to inaccurate estimation of “average” fragment size during qPCR quantitation.



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