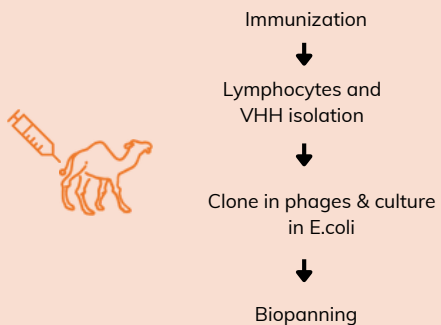


Fidabio Clone Selection: Optimized VHH Selection

AFFINITY AND TITER DETERMINATION BEFORE PURIFICATION



INITIAL PROCESSING



FIDABIO CLONE SELECTION



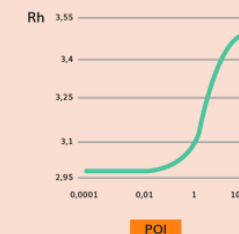
Clone characterization before purification

Optimal clone selection based on Affinity (Kd) & Expression levels, measured with a single assay

SINGLE BEST CLONE PURIFICATION



FURTHER CHARACTERIZATION



Eliminate the need for purification when working with VHH.



No need for His- or other tags. Work with native proteins.



Include protein functional performance (Kd) early in the selection process.



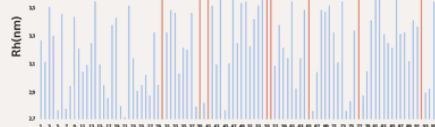
Fully automated process, accepting 96 well plates as sample format.

FIDABIO CLONE SELECTION

1

Single point size ranking of VHH clones

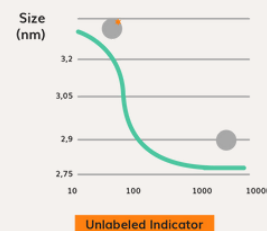
A size measurement that approaches the size of the VHH:Antigen complex indicates a clone with high expression levels, high affinity or a combination of the two. In the Figure on the right, the red clones represent the 8 highest read-outs and are selected for Step 2.



2

Competitive assay on selected clones

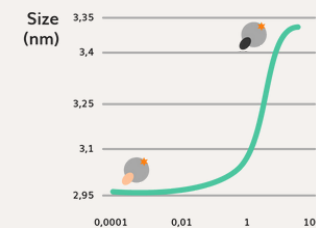
A fixed amount of labeled antigen is titrated with increasing amount of unlabeled Antigen into fermentation media. The size decreases until its minimum value where all the labeled indicator is free. Since the hydrodynamic radius (Rh) is linked to the fraction of VHH bound, the affinity and the expression level of VHH are assessed simultaneously.



3

Best VHH clone accurate characterization

Only clones with the best combination of affinity and expression level are produced in larger scale, purified and further characterized. Here, the fluorescently labeled Antigen is constant and pure VHH is titrated.



Would you like to know more?

Get in touch

