

# Lead Identification - Variant Screening

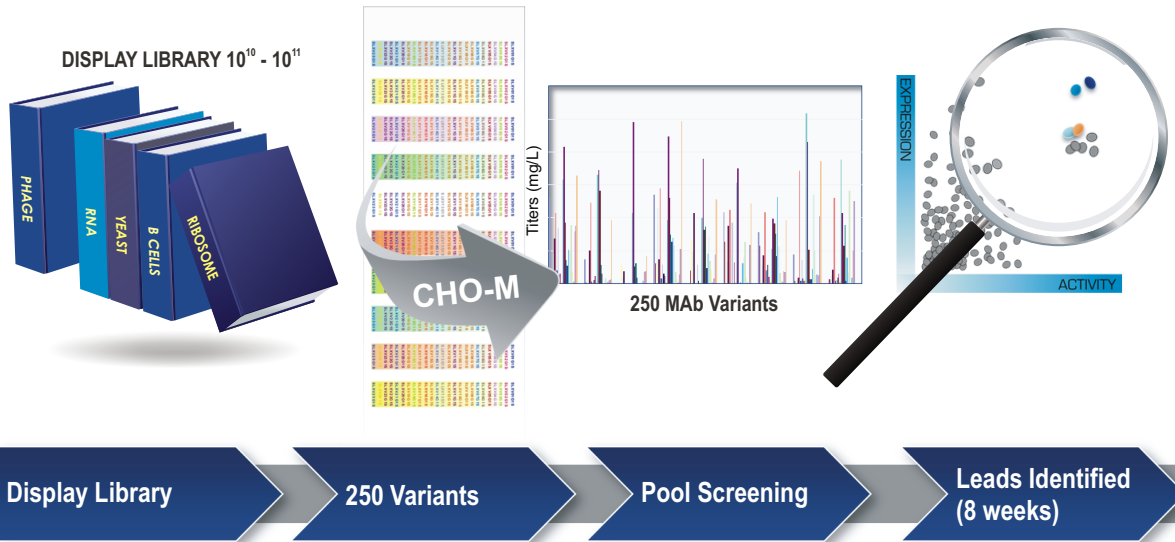
Selexis SUREvariant Screening™



## Selexis Lead Identification Strategy:

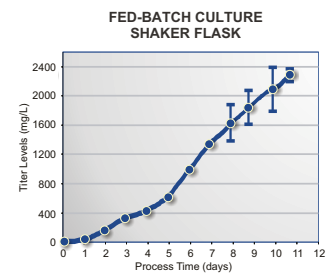
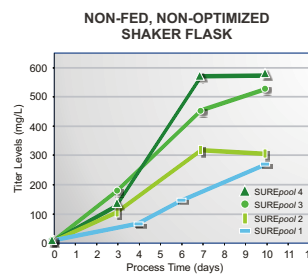
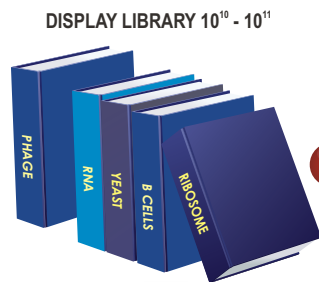
1. Weeds out candidates that cannot be easily expressed in mammalian cells
2. Allows promising candidates (highly active) that would be lost (not highly expressed) to cross the threshold of expression and be detected
3. Determines the values of mammalian protein modifications early
4. Ensures a steady supply of preclinical material
5. Significantly reduces development time and costs by eliminating the need for repeated transient transfections
6. Reduces manufacturing issues through early selection of candidates that are readily expressed
7. Eliminates unforeseen complications that can occur on transfer from HEK293 expression to CHO expression
8. Promotes faster, more informed decision-making

## Pick the Best Antibody for Improved Clinical Success



Cells, used as factories producing drugs, are critically important instruments employed in almost every aspect of biologics drug discovery, development and manufacturing. The Selexis SUREtechnology Platform™, in addition to significantly improving manufacturing cell line development, has been adapted to speed identification and development of novel biotherapeutics while still reducing the time and costs associated with entering pre-IND enabling studies.

Selexis' SUREvariant screening™ accelerates and improves outcomes from displayed library selection campaigns by reducing the time and the number of steps to identify potential lead candidates. The SUREvariant screening™ platform used at Selexis can generate panels of up to 500 CHO-M cell pools (SUREpools™), each expressing different protein variants. Typical expression levels in the supernatants (SUREnatants™) for MAb vary between 50-500 mg/L. The SUREnatants™ containing the recombinant proteins expressed with mammalian post-translational modifications can be readily assessed for activity. Subsequently, Selexis SUREpools™ top candidates can be banked (stored) and then reused for further assays. The top SUREpool™ candidate is transferred to the Selexis' SURE Cell line Development platform to generate a high producing clonal cell line ready for cGMP manufacturing. This procedure ensures perfect match between preclinical and clinical material notably including glycan analysis. The entire process from SUREvariant screening™ to the clonal cell line can be as short as 14 weeks. **Selexis SUREvariant screening™ can reduce your development costs by over \$500,000 per clinical candidate!**



### SUREvariant SCREENING

Up to 500 variants screened for **ACTIVITY** and **EXPRESSION** at the same time

### SUREpools

Typical MAb expression levels up to 500 mg/L  
5 weeks from transfection

### SUREclones

Typical fed-batch expression levels > 2 grams of protein  
5 weeks post screening

