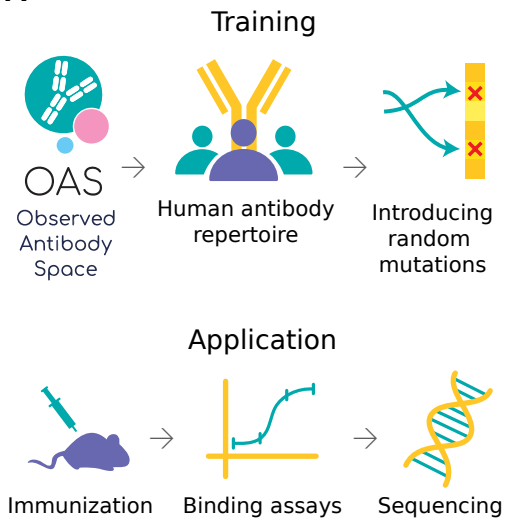
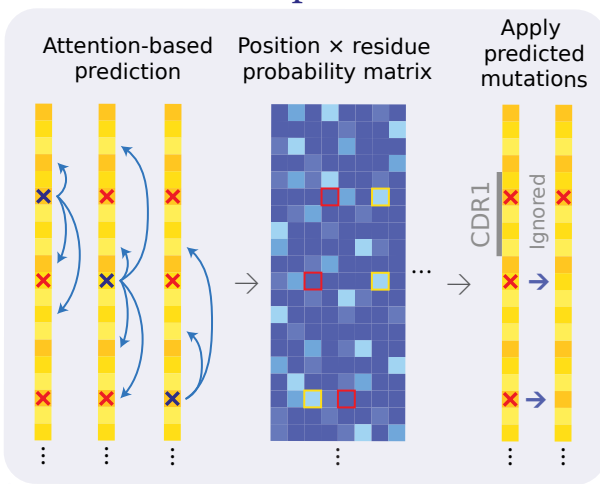


A



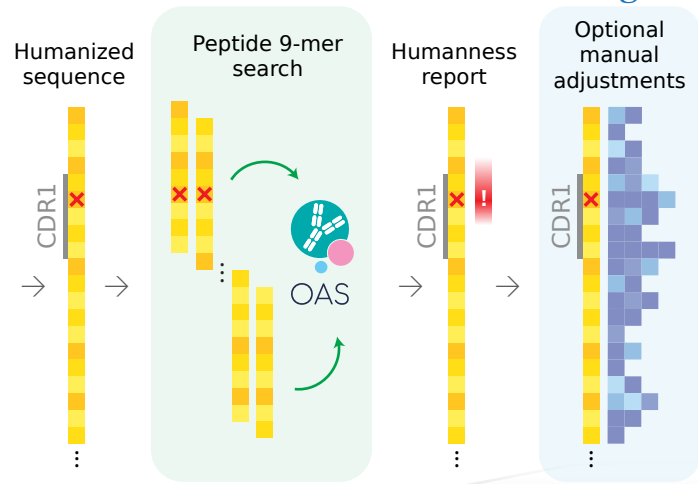
B

Sapiens



C

OASis



Designer

Humanize

Humanize an antibody using deep learning on natural antibody repertoires (Sapiens) or CDR grafting.

1 Input sequences

Input mode ☐ Single sequence ☐ Bulk mode

Provide multiple antibody sequences. Both chains of an antibody should have the same ID in the FASTA header, optionally with _H2C_LC or _VH_LV suffix.

Antibody sequences (FASTA)

```
>Antibody1 VH
QVQLQ...
>Antibody1 VL
DIVMT...
```

☐ Use example

Upload file (FASTA/PDB) PDB IDs ☐ Use example

☐ Choose files ☐ No file chosen

2 Humanization settings

Humanization Muromonab-CD3

Sapiens with 1 iteration | Keeping parental CDRs (kabat)

74% OASis identity (+37%)
Sequence identity with nearest human (are found in at least 10% of human subjects)
This corresponds to the 98th percentile

79% germline content (+13%)
IGHV1-46*01 + IGKV3-11*01

Heavy chain 78% OASis identity | 81% OASis percentile | 82% germline content

Parental: QVQLQSGAEGLASGASVSCASGYFFTRTHHWGAPQGLRMG...
Humanized: QVQLVSGAEKKPGASVSCASGYFFTRTHHWGAPQGLRMG...

Light chain 69% OASis identity | 86% OASis percentile | 75% germline content

Parental: EVLTQSPAILLSLPGERVLTLSGASGVV...
Humanized: EVLTQSPAILLSLPGERVLTLSGASGVV...

Antibody Designer Muromonab-CD3

74% OASis identity (+37%)
This corresponds to the 98th percentile

79% germline content (+13%)
IGHV1-46*01 + IGKV3-11*01

Heavy chain

Parental: QVQLQSGAEGLASGASVSCASGYFFTRTHHWGAPQGLRMG...
Result: QVQLVSGAEKKPGASVSCASGYFFTRTHHWGAPQGLRMG...

Light chain

Parental: EVLTQSPAILLSLPGERVLTLSGASGVV...
Result: EVLTQSPAILLSLPGERVLTLSGASGVV...