

Case Study: Isolation and specificity profiling of CXCR4 antibodies

THE NEED



FairJourney Biologics specializes in phage display for discovering therapeutic antibodies against complex membrane protein targets. They require high-concentration, native-conformation membrane proteins for screening phage libraries. For their CXCR4 antibody discovery project, FairJourney required a high quality source of antigen. They also needed to assess if the antibodies that they selected were specific for the CXCR4 target.

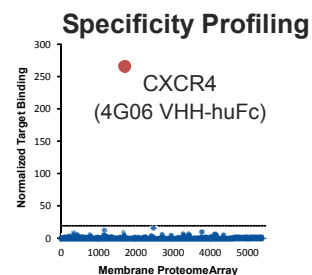
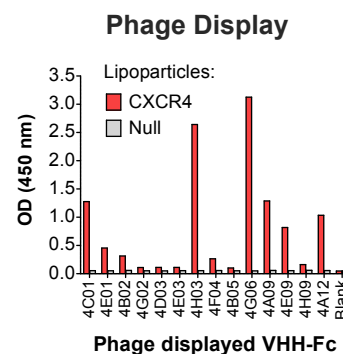
THE SOLUTION

Lipoparticles

Integral Molecular provided high-concentration CXCR4 Lipoparticles to FairJourney. This enabled them to screen a naive antibody phage display library and isolate highly reactive antibodies.

Membrane Proteome Array™

Integral Molecular's MPA technology was used to profile antibodies that were isolated using phage display. For characterization studies, soluble antibodies were expressed from cells using FairJourney's 'triple vector' which enables expression in multiple formats. The MPA screen showed that the CXCR4 antibodies had specificity for CXCR4 only, and none of the 5,000+ other membrane proteins in the array.



THE IMPACT

Antibody Discovery

FairJourney successfully used CXCR4 Lipoparticles to isolate antibodies using phage display. Antibody profiling using MPA showed that highly specific antibodies could indeed be isolated from FairJourney's naive antibody library.

For more information on FairJourney Biologics see www.fjb.pt

Looking for more information? Contact us below:

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