Case Study: How do i-Bodies interact with the GPCR CXCR4?

**THE NEED**
AdAlta sought to determine the functionality of their novel class of therapeutic drugs, i-bodies, with CXCR4, a transmembrane G protein-coupled receptor (GPCR).

**THE SOLUTION**

**Lipoparticles**
Integral Molecular provided Lipoparticles presenting human CXCR4 which enabled AdAlta to develop a library of i-bodies with activity against CXCR4

**Shotgun Mutagenesis**
Integral Molecular delivered Shotgun Mutagenesis Epitope Maps of i-bodies AM3-114, AM4-272, and AM3-523, which revealed that these i-bodies bind in a major sub-pocket of CXCR4. It was also found that the AM3-114 i-body binds deeper than any other reported antibody antagonist

**THE IMPACT**

**i-body Generation**
Generation of specific, high-affinity therapeutics to CXCR4 with antagonistic properties using Integral Molecular’s Lipoparticles.

**Clinical Implication**
i-bodies show the blocking of inflammatory cell migration without mobilizing stem cells, which is valuable for long term cancer/fibrosis treatments

**Publication**

Looking for more information? Contact us below:

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