

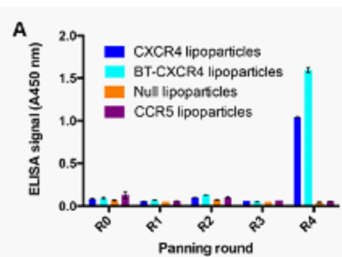
Case Study: How do i-Bodies interact with the GPCR CXCR4?



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



Integral Molecular epitope mapping reveals conformational CXCR4 binding pockets with discontinuous epitopes

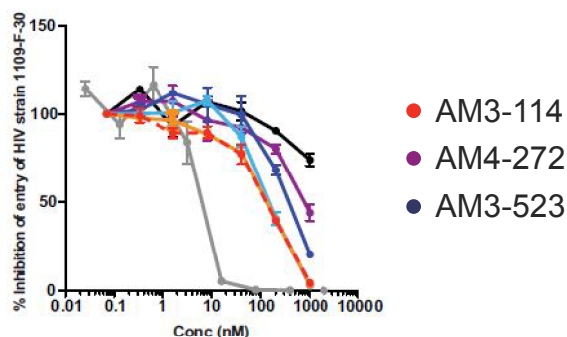
THE NEED

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 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

Data featured in Journal of Biological Chemistry, Griffiths, K. et al, 2016

Looking for more information? Contact us below:

info@integralmolecular.com | 215.966.6061 | www.integralmolecular.com