

Genovac on Antibody Discovery

MEET YOUR PEER

Brian Walters assumed the role of President & CEO of Genovac Antibody Discovery after leading a management-led buyout of Aldevron's Antibody Discovery Business Unit. Most recently, Brian was serving as President of Aldevron's Antibody Discovery Business Unit before leading the establishment of Genovac. Brian graduated from the University of Southern Mississippi with a Master of Science in Economic Development and received a Bachelor of Science from the University of North Dakota in Geography and Mathematics.



FINDING THE NEEDLE IN THE HAYSTACK

Traditional hybridoma and phage display methods have shown limited success in delivering therapeutic antibodies against promising but difficult targets such as GPCRs and ion channels. Genovac is a contract research organization that is committed to finding the right antibodies in the shortest amount of time. To accomplish this, they offer a powerful genetic immunization technology coupled with the Beacon® optofluidic system to screen the B cell repertoire from mice and rats (with rabbit and alpaca platforms under development), providing access to greater biodiversity than traditional approaches.

GOING WHERE HYBRIDOMA CAN'T

In the recent webinar, [Tackle Difficult Targets by Accessing Broad B Cell Diversity](#), Genovac demonstrated how Opto™ Plasma B Discovery workflows can yield up to 10-times more hits than hybridoma campaigns against difficult membrane targets like GPCRs and other multi-pass transmembrane targets.

The three targets used in this work exhibit common challenges encountered in difficult targets:

- small extracellular regions that limit the number of antigenic epitopes
- high sequence homology that reduces the chances of eliciting an immune response
- poor cell surface expression that makes cell-based screening difficult

Across all three campaigns, Genovac found over 100 antibodies on the Beacon system compared to only 15 by hybridoma (**Figure 1**). The discovery of a greater number of hits enabled Genovac to increase the probability of identifying lead molecules against these difficult targets.

“ The throughput of two Beacon systems, coupled with our genetic immunization technology, has increased the probability of campaign success by delivering 10-fold more lead candidates against difficult targets like GPCRs.

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— Brian Walters
CEO of Genovac

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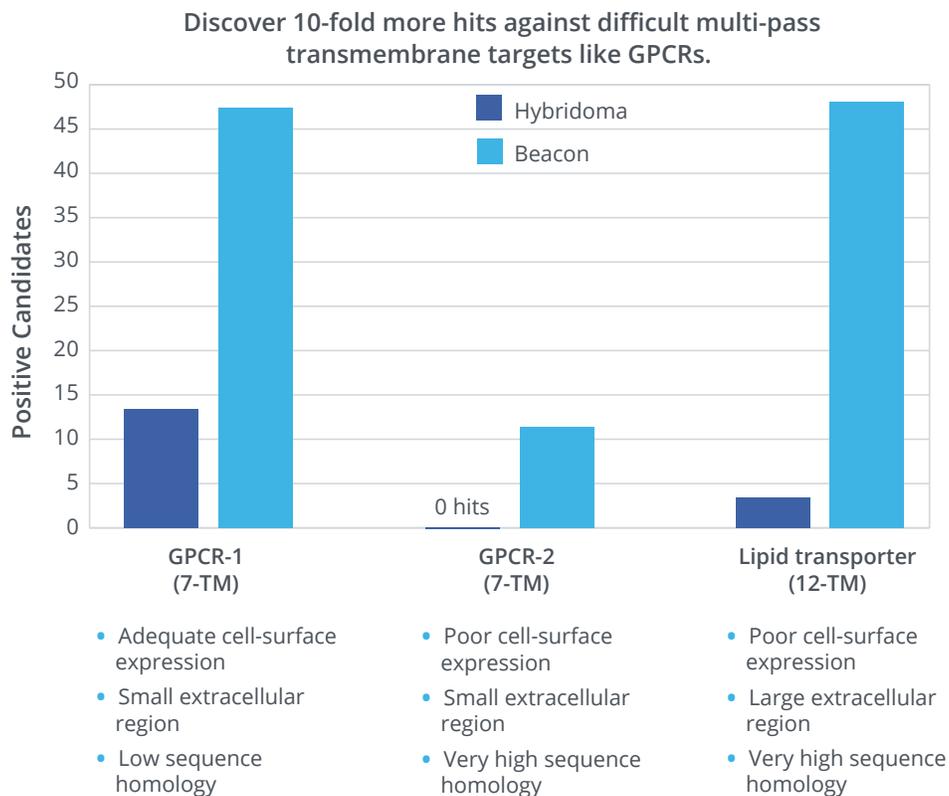


Figure 1. Direct functional profiling of B cells can yield up to 10-fold more hits than hybridoma campaigns against difficult membrane targets like GPCRs.

FOR MORE INFORMATION, VISIT
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