

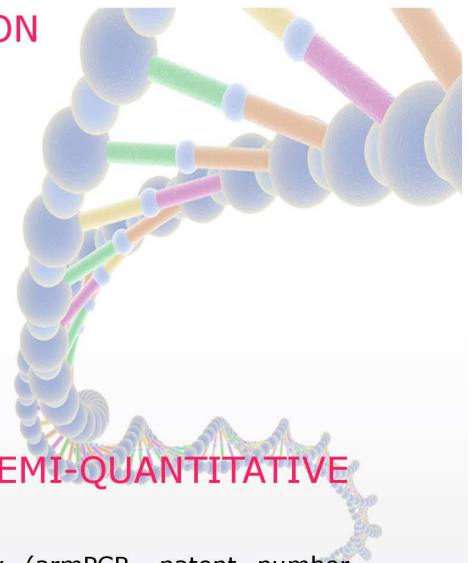
## UNDERSTAND A PERSON'S HEALTH STATUS

An immune repertoire is the sum total of T and B cells in a body at any given moment. It is both a snapshot and historical record of a person's immune function. Sequencing the expressed T- B-cell receptor genes in the immune repertoire allows for an accurate evaluation of a person's health status and risks for different diseases.

## INCLUSIVE AND SEMI-QUANTITATIVE AMPLIFICATION IS THE KEY FOR IMMUNE REPERTOIRE ANALYSIS

Compared to normal individuals, patients with different conditions may have their immune profile skewed in both qualitative and quantitative ways, leading to a lack of immune repertoire diversity.

Determination of the immune repertoire requires an amplification technology that is both inclusive of the entire immune system, for a complete picture, and semi-quantitative, for reliable comparison between samples.



## iREPERTOIRE - THE ANSWER TO INCLUSIVE AND SEMI-QUANTITATIVE AMPLIFICATION OF THE IMMUNE REPERTOIRE

iRepertoire has developed a novel, patented multiplex PCR technology (armPCR, patent number 7,999,092) that uses V,D & J specific primers for human or mouse genes to inclusively and semi-quantitatively amplify all the CDR3 and antigen binding regions from T or B cell receptors in a single reaction for direct loading onto a next generation sequencing system. A robust bioinformatic pipeline turns the sequencing data into a distinct, comprehensive and easy-to-understand immune profile.

## ONE STOP SOLUTION FOR YOUR IMMUNE REPERTOIRE RESEARCH

AITbiotech offers iRepertoire primers, amplification service, next generation sequencing and bioinformatic support for both human and mouse immune repertoire projects - from all chains and subunits of T and B cells. Sequencing is currently available on the Illumina miSeq and HiSeq systems.

For more information, please contact us at [enquiries@aitbiotech.com](mailto:enquiries@aitbiotech.com) or visit <http://www.irepertoire.com>