

# Neoepitope Direct™

**Identify neo-epitopes directly  
from tissue**



**CellCarta**

formerly  
Caprion-HistoGeneX



MAPPING PRECISION MEDICINE

## Why predict when you can observe?

With CellCarta's Neopeptide Direct™, epitope identification is achieved directly from tissue, not from prediction algorithms. Our solution allows for confident identification, qualification, and characterization of naturally presented tumor antigens relative to adjacent normal tissue.

**Antigens are presented, not predicted.**

## A faster, efficient & more reliable pathway to discovery

The race to identify neo-epitopes is crucial for immune system research and critical in drug and vaccine development. Universally, innovative pharmaceutical and biotech companies recognize the power of mass spectrometry to identify peptide sequences involved with T-cell responses. At the same time, many rely on voluminous immunoinformatic prediction databases that often, at the end of a long discovery process, provide predictive results as opposed to observed ones.

## Neopeptide Direct™: one-of-a-kind approach to generate fewer, but better characterized targets

DISCOVERY + PRIORITIZATION + CHARACTERIZATION = CONFIDENCE



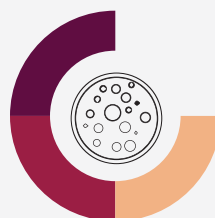
### MASS SPECTROMETRY

Primary tissue/*in vitro* models: Identify peptides present on the surface of cells and visible to T cells.



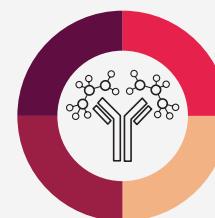
### ANTIGENATLAS™

Proprietary healthy tissue database: Qualify and prioritize candidate targets.



### ELISPOT

Comprehensive assessment of T-cell response: Sensitive and rapid confirmation of antigen-specific response.



**High quality immuno-oncology targets identified for vaccines, CAR-T and antibodies.**

## Neopeptide Direct™ The optimal workflow that shortens your development cycle

Based on years of mass spectrometry expertise, Neopeptide Direct™ is a rigorous and reproducible solution that offers a more reliable pathway to your immuno-oncology discovery.

### Mass Spectrometry (LC-MS/MS)

#### ■ ACCURATE AND RELIABLE

Increased sensitivity and confident peptide identification as a result of high-resolution MS/MS data.

### AntigenAtlas™

#### ■ COMPREHENSIVE AND UP-TO-DATE

Our proprietary healthy tissue database, developed by immunology scientists and bioinformatic experts, allows better interpretation and prioritization of the data.

### ELISpot

#### ■ QUICK AND EFFICIENT

Characterize immune reactivity to candidate targets in autologous or heterologous systems.

## ADVANTAGES

- Directly identifies naturally presented tumor antigens relative to adjacent normal tissue
- Focuses on naturally processed peptides that are presented by MHC complexes *in vivo*
- Reduces reliance on epitope modeling
- Better characterized candidates for follow-up
- Increased coverage of different HLA types

## WHAT OUR CLIENTS SAY:

“A robust platform that can be depended on to consistently provide high quality data run after run.”

“Peptides identified needed to meet specific length and predict affinity. Meeting these criteria indicated that the peptides identified were high quality, and could be confidently used in further analysis.”



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## ABOUT CELLCARTA

Leading provider of specialized precision medicine laboratory services to the biopharmaceutical industry. Leveraging its integrated analytical platforms in immunology, histopathology, proteomics and genomics, as well as related specimen collection and logistics services, CellCarta supports the entire drug development cycle, from discovery to late-stage clinical trials. The company operates globally with over 700 employees in its nine facilities located in Canada, USA, Belgium, Australia, and China.

**For more information on  
how CellCarta can partner  
with you, please contact us:**

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