

# Arriving early 2023

Source and integrated heating solutions for Thermo Scientific and Sciex mass spectrometry users.



**IonOpticks TS™**  
New instrument interface for Thermo Scientific users.



**IonOpticks SX™**  
New instrument interface for Sciex users.

# Proteomics Solved.

Who knew LC-MS could be so easy?



## Tech Specs

Column format	Analytical column
Column type	Reversed-phase
For use with	UHPLC
Length	15 cm
Inner Diameter	75 µm
Stationary phase	C18
Pore size	120 Å
Pressure	>1700 bar
Temp. limit	60°C
Particle size	1.7 µm
pH stability	1-8

(Part No. AUR3-15075C18 / AUR3-15075C18-CSL)

## ionopticks

68-70 Hanover Street  
Fitzroy, Victoria 3065, Australia

To view our full product range visit  
[www.ionopticks.com/products](http://www.ionopticks.com/products)

For compatibility and technical support visit  
[helpcentre.ionopticks.com](http://helpcentre.ionopticks.com)

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[ionopticks.com/get-in-touch](http://ionopticks.com/get-in-touch)

PRODUCT OF AUSTRALIA

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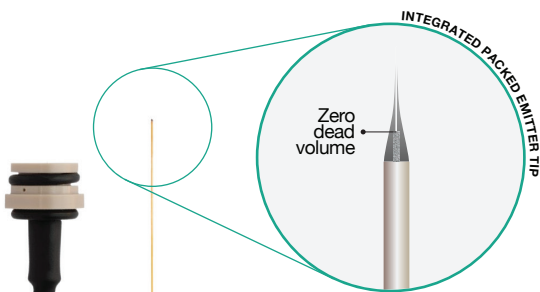
Aurora  
GENERATION **3**

Aurora™  
**ELITE**

15 cm nanoflow UHPLC packed emitter column.

# Aurora™ ELITE

15 cm nanoflow UHPLC packed emitter column.

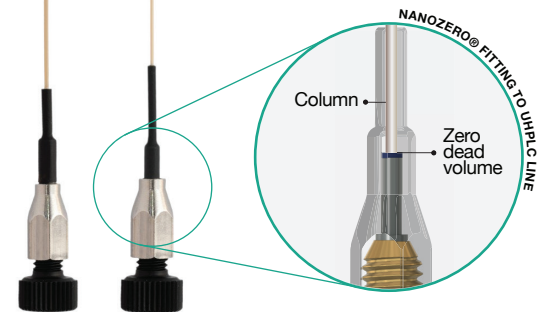


## Our 'experiment in a day' solution.

A product made for researchers, by researchers. The Aurora Elite™ is specifically tailored to achieve the deep discovery synonymous with Aurora Series™ columns, in cadence with researchers wishing to leverage 'experiment in a day' workflows.

### Product Benefits:

- + High throughput
- + Exceptional coverage for rate of throughput
- + Balanced throughput and depth of coverage

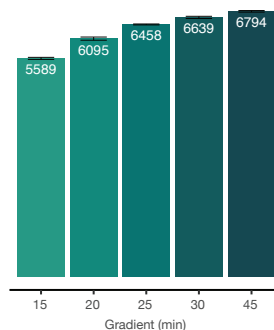


## Spectacular protein IDs. Every run. Every time.

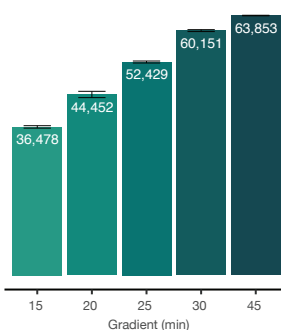
### More protein IDs. Less time.

Identify more than 6000 proteins per sample using our 50 samples per day method (20 min gradient).

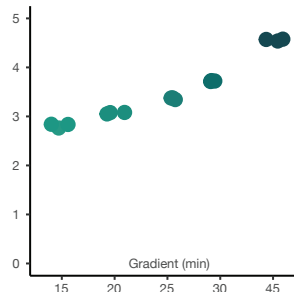
**Figure 1**  
6000+ Unique Protein IDs



**Figure 2**  
60,000+ Unique Peptide IDs



**Figure 3**  
Peak Width FWHM (Sec)



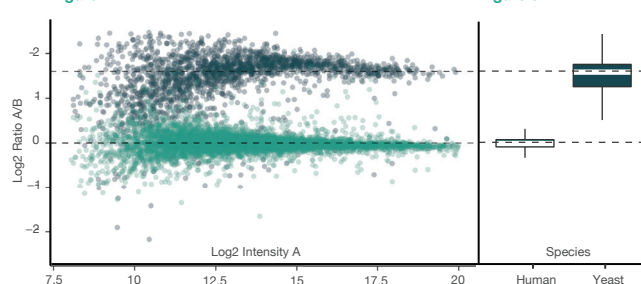
**Figures 1, 2 & 3:** Identified unique proteins, peptides and average Full Width at Half Maximum (FWHM) from 80 ng HeLa Tryptic Digest injection on an Aurora Elite™ 15 cm x 75 µm column using different gradient lengths. Samples were run on a Waters ACQUITY UPLC M-Class coupled to a Bruker timsTOF Pro, dia-PASEF acquisition. Data analysed using DIA-NN.

**Figure 4:** Yeast tryptic digest was spiked into a HeLa tryptic digest (200 ng) in different ratios (Sample A - 45 ng; Sample B - 15 ng). Samples were run on a Waters ACQUITY UPLC M-Class coupled to a Bruker timsTOF Pro, dia-PASEF acquisition using an Aurora 15 cm x 75 µm column. Data analysed using DIA-NN. Each point represents a unique protein with ratios calculated between the A and B samples. **Figure 5:** Boxplot demonstrating average ratio and interquartile range of data. Expected ratios are indicated with dashed lines.

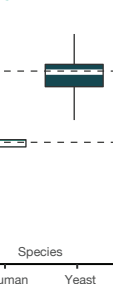
### High quantitative accuracy

Identify large numbers of unique proteins without compromising quantitative accuracy.

**Figure 4**



**Figure 5**



## Aurora Generation 3

UHPLC packed emitter columns

Delivering unrivalled coverage, throughput, sensitivity and reproducibility, Generation 3 Aurora Series™ columns embody all of the strengths of previous generations, augmented by three years of intensive research, development and industry collaboration.

## Designed by researchers, for researchers.

### We've listened. We've collaborated.

Throughout the development of the Generation 3 Aurora Series™ we've included a range of improvements to minimise experiment disruption and increase performance.

- + Integrated packed emitter
- + True-zero pre-column dead volume
- + 'QuickFit' plug and play technology
- + High-pressure fitting holds >1700 bar



**Toby Dite**  
Research Officer  
WEHI Proteomics Lab

"After swapping our 25 cm Generation 2 Aurora column with the 15 cm Generation 3 Aurora Elite™ column, we were surprised to see our peptide and protein numbers unchanged!"

So not only are we able to run our old methods with no loss of data, we can now run shorter methods using faster flow rates for our sample loading and column washing and equilibration."