

Finland-Helsinki: Mass spectrometer
OJ S 15/2021 22/01/2021
Contract award notice
Supplies

Legal Basis:

Directive 2014/24/EU

Section I: Contracting authority

I.1. Name and addresses

Official name: University of Helsinki
National registration number: 0313471-7
Postal address: Yliopistonkatu 3
Town: Helsinki
NUTS code: FI1B Helsinki-Uusimaa
Postal code: 00014
Country: Finland
Contact person: Katri Leino
E-mail: katri.e.leino@helsinki.fi
Telephone: +358 503188076
Internet address(es):
Main address: <https://www.helsinki.fi/en>

I.4. Type of the contracting authority

Body governed by public law

I.5. Main activity

Education

Section II: Object

II.1. Scope of the procurement

II.1.1. Title

Ultimate Sensitivity LC-MS/MS System

II.1.2. Main CPV code

38433100 Mass spectrometer

II.1.3. Type of contract

Supplies

II.1.4. Short description

For and on the behalf of the contracting entity University of Helsinki (hereinafter referred to as the Buyer), we invited tenders for:

- 1.1 Ultimate sensitivity LC-MS/MS System for the analysis of lipid mediators, especially the specialized pro-resolving mediators (SPMs) at very low concentration levels, and capable for both ultimate sensitivity MRM quantification and information-dependent acquisition of full MS /MS spectra with high intensity, both from single injection as per enclosed specifications.
- 1.2 Optional parts for the system (1.1) as per enclosed specifications (II.2.4).

- 1.3 Training for use and service.
 - 1.3.1 Training on site in connection with the installation.
 - 1.3.2 Additional training for software, setting applications and basic service (option).
- 1.4 Installation and acceptance test on site.
- 1.5 Appropriate spare parts for mass spectrometer for five years operation.

II.1.6. Information about lots

This contract is divided into lots: no

II.1.7. Total value of the procurement

Value excluding VAT: 344 852,00 EUR

II.2. Description

II.2.3. Place of performance

NUTS code: FI1B Helsinki-Uusimaa

II.2.4. Description of the procurement

When evaluating offered LC-MS/MS systems, the mass spectrometer performance in the indicated purpose of use (lipid mediator analysis) is the most important criterium. Only new (no demo) equipment can be offered, which applies for all items included.

1) Mass spectrometer requirements are:

a) Simultaneous

(i) scheduled collection of ultimate sensitivity quantitative MRM (Multiple Reaction Monitoring) data (for lipid mediator quantification) and

(ii) MRM information dependent acquisition of sensitive full scan MS/MS spectral data (with high spectrum intensity, obtained by trapping and concentrating of fragment ions and scanning them out fast, which is required to confidently confirm very low-concentration lipid mediator structures). Thus, in addition to targeted quantitation, the instrument needs to provide structure confirmation of the quantified analytes based on complete high-quality product ion spectra covering the full mass range and from the same one injection and LC-MS/MS acquisition.

b) Sensitive detection with (lower) limit of quantification (L)LOQ of 0.05 – 1 ng/mL for different lipid mediator species, in general, and with (L)LOQ 0.1 ng/mL or limit of detection (LOD, in matrix) 0.1 pg for the SPMs (resolvins) RvD1 or RvD3, and RvE1 (or lower values). You are requested to attach to your tender as reference three (3) published peer-reviewed research articles confirming that this level of sensitivity has been achieved by researchers for the above-mentioned analytes with the offered MS/MS equipment or older models of the same equipment of the Supplier. By references evidenced ultimate detection sensitivity for the above mentioned resolvins, lower than the (L)LOQ 0.1 ng/mL or LOD (this latter in matrix) 0.1 pg is acknowledged when evaluating quality.

c) Fast switching between the negative and positive ion mode detection in single injection and one LC-MS/MS acquisition.

These minimum requirements (1a,b,c) rule out triple quadrupole mass spectrometers that do not also have the ion trapping capabilities, required for the ultimate sensitivity SPM detection and high-quality full scan product ion MS/MS spectra. Possibility for true MS3 (i.e. MS/MS/MS) and MRM3 scanning is regarded beneficial when evaluating quality.

2) UHPLC (ultra high pressure liquid chromatograph) system minimum requirements are, that it consists of an autosampler with sample cooling capability, a column oven, a degassing system and a solvent bottle container. The system shall be fully compatible with and fully remotely controllable by the mass spectrometer computer software. Maximum injection volume of the autosampler should be at least 40 µL.

UHPLC quality assessment criteria are listed in Other terms and conditions.

Minimum requirements include also (3-6):

- 3) Computer with adequate processing power and all modern data transfer capabilities. Large monitor and keyboard.
- 4) One license for the instrument control and data acquisition software and several licenses for the data processing software required for the quantitative and qualitative analyses of the lipid mediators.
- 5) Transportation to customer's laboratory and installation therein, including acceptance test on site. The requirements for the site of installation should be specified.
- 6) Appropriate spare parts.

Following items are requested to be offered as option (7-9):

- 7) Extended warranty for additional years (extending the standard 24-month warranty of the new LC-MS/MS system) (option).
- 8) Bench for the LC-MS/MS system (rough pumps inside; soundproofed) (option). Please, specify the dimensions, since laboratory space is limited.
- 9) Software packages for lipidomics or metabolomics (option).

II.2.5. Award criteria

Quality criterion - Name: Quality, the mass spectrometer (subdivided) / Weighting: 55

Quality criterion - Name: Quality, UHPLC (subdivided) / Weighting: 10

Quality criterion - Name: Quality, delivery time / Weighting: 5

Quality criterion - Name: Quality, after-sales service and technical support / Weighting: 5

Price - Weighting: 25

II.2.11. Information about options

Options: yes

Description of options:

Optional parts for the system (1.1) as per enclosed specifications (II.2.4). Additional Training for software, setting applications and basic service (option).

II.2.13. Information about European Union funds

The procurement is related to a project and/or programme financed by European Union funds:
no

II.2.14. Additional information

Section IV: Procedure

IV.1. Description

IV.1.1. Type of procedure

Open procedure

IV.1.3. Information about a framework agreement or a dynamic purchasing system

IV.1.8. Information about the Government Procurement Agreement (GPA)

The procurement is covered by the Government Procurement Agreement: yes

IV.2. Administrative information

IV.2.1. Previous publication concerning this procedure

Notice number in the OJ S: [2020/S 212-516056](#)

IV.2.8. Information about termination of dynamic purchasing system

IV.2.9. Information about termination of call for competition in the form of a prior information notice

Section V: Award of contract

Title:

Ultimate sensitivity LC-MS/MS System

A contract/lot is awarded: yes

V.2. Award of contract

V.2.1. Date of conclusion of the contract

18/12/2020

V.2.2. Information about tenders

Number of tenders received: 1

Number of tenders received from SMEs: 1

Number of tenders received from tenderers from other EU Member States: 0

Number of tenders received from tenderers from non-EU Member States: 0

Number of tenders received by electronic means: 1

The contract has been awarded to a group of economic operators: no

V.2.3. Name and address of the contractor

Official name: A B Sciex Oy

National registration number: FI22883422

Postal address: c o Danaher Finland Oy, Biolinja 12

Town: Turku

NUTS code: FI1 Manner-Suomi

Postal code: 20750

Country: Finland

The contractor is an SME: yes

V.2.4. Information on value of the contract/lot

Initial estimated total value of the contract/lot: 340 000,00 EUR

Total value of the contract/lot: 344 852,00 EUR

V.2.5. Information about subcontracting

Section VI: Complementary information

VI.3. Additional information

VI.4. Procedures for review

VI.4.1. Review body

Official name: Markkinaoikeus

Postal address: Radanrakentajantie 5

Town: Helsinki

Postal code: 00520

Country: Finland

E-mail: markkinaoikeus@oikeus.fi

Telephone: +358 295643300

Internet address: <http://www.oikeus.fi/markkinaoikeus>

VI.5. Date of dispatch of this notice

18/01/2021