

ACAN # 20-58090 for the Development of Sulphated Lactosyl Archaeol (SLA) and Sulfated Lactosyl Archaeosomes to be delivered to Human Health Therapeutics located at 1200 Montreal Rd, Bldg. M54 (Ottawa Ont.

1. ACAN

An Advance Contract Award Notice (ACAN) allows departments and agencies to post a notice, for no less than fifteen calendar days, indicating to the supplier community that it intends to award a good, service or construction contract to a pre-identified contractor. If no other supplier submits, on or before the closing date, a statement of capabilities that meets the requirements set out in the ACAN, the competitive requirements of the government's contracting policy have been met. Following notification to suppliers not successful in demonstrating that their statement of capabilities meets the requirements set out in the ACAN, the contract may then be awarded using the Treasury Board's electronic bidding authorities.

If other potential suppliers submit statements of capabilities during the fifteen calendar day posting period, and meet the requirements set out in the ACAN, the department or agency must proceed to a full tendering process on either the government's electronic tendering service or through traditional means, in order to award the contract.

Description of the Work

2. Definition of the requirement

The National Research Council of Canada (NRC) requires a biological process to be developed and used for the production of archaeosomes composed of sulfated lactosyl archaeol (SLA; 6'-sulfate- β -D-Galp(1,4)- β -D-Glcp(1,1)-archaeol. Archaeosomes should be of average size no greater than 200 nm and should be composed of sulfated lactosyl archaeol (R stereoisomer).

3. Criteria for assessment of the Statement of Capabilities (minimal essential requirements)

- Selected vendor must have experience of bioprocess development from bench to fermenter scale with capabilities for production of archaeobacterial biomass
- Selected vendor must have capabilities for extraction of archaeol core lipid from archaeobacterial biomass
- Selected vendor must have synthetic chemistry experience and capabilities for synthesis of sulfated lactosyl archaeol from archaeol
- Selected vendor must have experience and capabilities necessary for formulation of liposomes
- Selected vendor must have capabilities for scale-up of bioprocess
- Selected vendor must have capabilities for analytical development

4. Justification for the Pre-Identified Supplier

BioVectra Inc. is the only company in Canada with the experience and equipment necessary to do this work. NRC have a need to work with Canadian companies due to difficulties with cross border shipments under current pandemic particularly in the field of lipid based products due to their high demand for RNA/DNA based Sars-CoV2 vaccines. . Since the start of the pandemic (March 2020), NRC have contacted multiple Canadian companies to investigate whether they can produce sulfated lactosyl archaeosomes for us. This is a complex multi-step process: to do this they must first grow up archaeobacteria in a fermentation facility, isolate the archaeol core lipid, chemically add a saccharide group and then formulate into liposomes. Therefore multiple key skill sets are required to complete

process. We also require the vendor to be able to sufficiently develop the process for subsequent GMP manufacturing. We have only been able to find one Canadian company (Biovectra) with the experience, equipment and overall capability to do this work for us. Other companies have indicated that they could produce a fully synthetic (i.e., chemically produced) version but this is non-equivalent since unlike the 100 % "R" stereoisomer generated by the biological process, a synthetic version is less pure and therefore much harder to characterize for clinical use.

In summary, Biovectra is the only company which offers the fully biological process necessary to produce our desired product.

5. Government Contracts Regulations Exception

The following exception(s) to the Government Contracts Regulations is invoked for this procurement under subsection 6(d) - "only one person is capable of performing the work".

6. Period of the proposed contract or delivery date

- The requirements for the service contract is 1 years. NRC may elect to have future requirements of similar scope for an additional 4 years.

7. Cost estimate of the proposed project

The level of effort for this contract is estimated up to \$410,000, plus applicable taxes and for future contracts up to 2 million.

8. Name and address of the pre-identified supplier

BIOVECTRA INC

11 AVIATION AVENUE

CHARLOTTETOWN, PEI

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9. Suppliers right to submit a statement of capabilities

- Suppliers who consider themselves fully qualified and available to provide the services/goods described herein, may submit a statement of capabilities in writing to the contact person identified in this Notice on or before the closing date

of this Notice. The statement of capabilities must clearly demonstrate how the supplier meets all of the advertised requirements.

10. Closing date for the submission of a statement of capabilities

- Dec 28, 2020 14:00 eastern time

11. Inquiries and submission of statement of capabilities

Directed to: Steve Cassidy

Telephone: 613-299-2722

E-mail: Steve.Cassidy@nrc-cnrc.gc.ca