



This document is scheduled to be published in the Federal Register on 08/12/2015 and available online at <http://federalregister.gov/a/2015-19742>, and on FDsys.gov

Billing Code: 3510-13

DEPARTMENT OF COMMERCE

National Institute of Standards and Technology

External RNA Controls Consortium – Call for Participation and Contributions to a Sequence Library

AGENCY: National Institute of Standards & Technology (NIST), Department of Commerce.

ACTION: Notice

SUMMARY: NIST is reconvening the [External RNA Controls Consortium \(ERCC\)](#), a public, private, and academic research collaboration to develop external RNA controls for gene expression assays ([71 FR 10012](#) and [NIST Standard Reference Material 2374](#), available at <http://www.nist.gov/mml/bbd/srm-2374.cfm>). ERCC products are being extended to accommodate recently emerged applications. This is a call for (1) participation in ERCC activities and (2) collection of nucleic acid sequences to extend the ERCC library.

The ERCC library is a tool for generating RNA controls; any party may disseminate such controls.

Intellectual property rights may be maintained on submitted sequences, but submitted sequences must be declared to be free for use as RNA controls.

DATES: NIST will compile a library of sequences to be experimentally evaluated as RNA controls. Those sequences received by 5:00 pm Pacific Time September 30, 2015 will be considered for inclusion in this evaluation. Sequences submitted after this date may be considered in further evaluations.

ADDRESSES: Inquiries regarding ERCC participation and/or sequence submissions should be sent by email to ERCCsequences@nist.gov. See SUPPLEMENTARY INFORMATION for file formats and other information about sequence submission.

FOR FURTHER INFORMATION CONTACT: Sarah Munro, Jerod Parsons, or Marc Salit by email at ERCCsequences@nist.gov.

SUPPLEMENTARY INFORMATION:

NIST is reconvening the [External RNA Controls Consortium \(ERCC\)](#) to develop external RNA controls for gene expression assays. This group has already established a set of 96 RNA control sequences, commonly referred to as the ERCC controls, which is maintained as [NIST Standard Reference Material 2374](#). Participation in the ERCC is open to all. ERCC activities may include:

1. design and contribution of RNA control sequences,
2. validation of RNA control molecules with multi-laboratory testing,
3. analysis of results, and
4. dissemination of ERCC products, such as validated sequences, methods, and analysis tools.

For further information on ERCC participation, please contact ERCCsequences@nist.gov.

NIST is collecting nucleic acid sequences to form an extended library of ERCC sequences suitable for the preparation of RNA controls. The RNA control sequences are intended to mimic endogenous RNA molecules, including mRNA, mRNA isoforms, microRNA, and other classes of biological RNA molecules. Intellectual property rights may be maintained on submitted sequences, but submitted

sequences must be declared to be free for use as RNA controls. Selected sequence contributions will be experimentally evaluated based on testing of the following three RNA control hypotheses:

1. The RNA controls behave as mimics of endogenous RNA in assays
2. The RNA controls do not interfere with assays of endogenous RNA
3. Hypotheses 1 and 2 are valid in commonly used RNA assays

Sequence submissions should consist of (1) a single sequence fasta file or multi-fasta file and (2) a single text file containing the following metadata for each submitted sequence:

1. The class of RNA molecule the control(s) are intended to mimic
2. Source of the sequence(s)
3. Proposed use scenario for the control(s)
4. Physical form of nucleic acids submitted (if any)
5. Intellectual property rights status

To submit files or for further questions on sequence submission please contact
ERCCsequences@nist.gov.

Authority: 15 U.S.C. § 272(b) and (c).

Kevin Kimball
Chief of Staff

[FR Doc. 2015-19742 Filed: 8/11/2015 08:45 am; Publication Date: 8/12/2015]