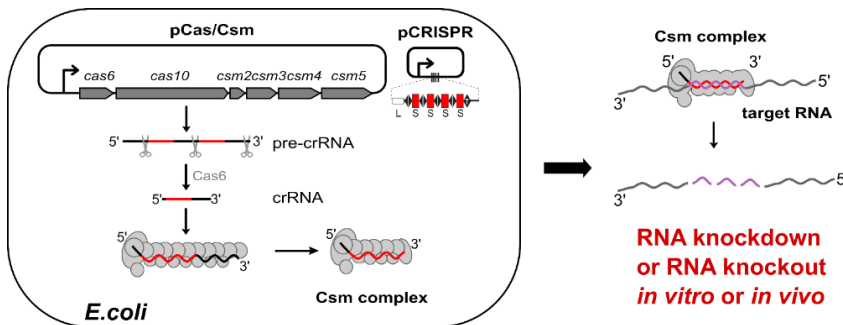


Programmable RNA shredding by the type III-A CRISPR-Cas system of *Streptococcus thermophilus*

BRIEF DESCRIPTION OF A TECHNOLOGY

The type III-A CRISPR-Cas Csm complex (comprising crRNA, Csm3, Csm4 and other subunits) can be used for the cleavage of target RNA molecules that contain sequences complementary to the bound crRNA. This technology provides a method for site-specific RNA cleavage, enabling RNA knock-down or knockout both *in vitro* and *in vivo*.



PURPOSE

Programmable RNA cleavage *in vitro*, and targeted RNA knockdown & knockout *in vivo*.

FIELDS OF APPLICATION

Functional gene analysis, RNA interference, transcriptomic analysis.

TECHNOLOGY READINESS LEVEL

Technology validated in lab.

INTELLECTUAL PROPERTY

Patents: EP3189140B1, US10385336B2

Applicant: Vilnius University (Lithuania)

INVENTORS

- Virginijus SIKSNYS
- Migle KAZLAUSKIENE
- Gintautas TAMULAITIS

PUBLICATIONS

Tamulaitis et al. (2014) *Molecular Cell*, doi: 10.1016/j.molcel.2014.09.027
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Vilnius
University

CONTACTS

Dr. Ramūnas Grigonis
Innovation Office, Department for
Research and Innovation, Vilnius
University
E-mail: ramunas.grigonis@cr.vu.lt
Phone: +370 5 268 7006