**SparQ™ Cumat Switch**
Next generation inducible expression technology in powerful lentivector formats

**The Cumat Switch Inducible System**
The SparQ™ cumat switch lentivectors work through virus transduction and deliver extremely tight control, robust induction and a highly titratable expression switch for inducible gene and microRNA expression studies. The system works through the CymR repressor that binds the cumat operator sequences (CuO) with high affinity. The repression is alleviated through the addition of Cumat, a non-toxic small molecule that binds to CymR. This system has a dynamic inducibility, can be finely tuned and is reversible over and over for timed expression studies.

**Cumate Switch OFF**

![Diagram of Cumate Switch OFF](Diagram.png)

Lower background than other inducible systems with robust induction

The SparQ cumat switch lentivectors feature low background with a higher induction rate of 32-fold when compared to other inducible systems. Zero leakiness with dynamic induction and titratability make the cumat switch system a better choice. A variety of SparQ inducible lentivector configurations and CymR formats are available to customize your induction experiments.

![Graph of % GFP Positive Cells](Graph.png)
Dynamic Ability to Fine-tune Expression Induction

Choose from a Variety of Inducible Configurations

Select a CymR Format for your Studies

We Also Offer Custom Services

SparQ™ Cumate Switch Inducible Lentivector System

Turn ON -> Switch OFF -> and ON again

Custom cumate switch lentivector constructs also available!

We Also Offer Custom Services
System Biosciences offers a wide-range of custom services to support your research, allowing you to spend less time making tools, and more time making discoveries. To learn more, visit our website at www.systembio.com/service or call us at 888-266-5066.