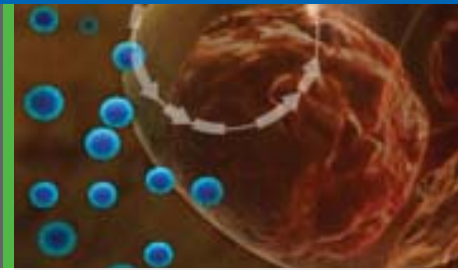


# SparQ™ Cumate Switch

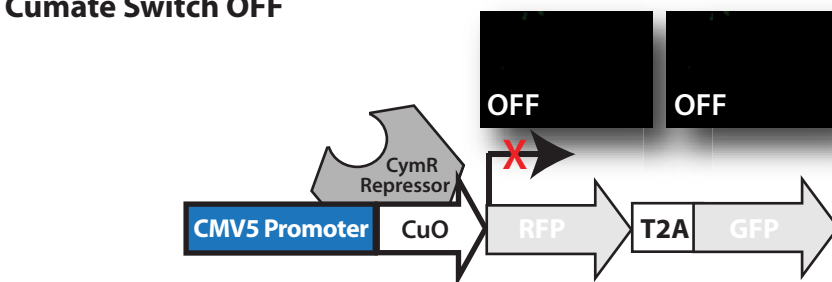
Next generation inducible expression technology in powerful lentivector formats



## The Cumate Switch Inducible System

The SparQ™ cumate 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 cumate operator sequences (CuO) with high affinity. The repression is alleviated through the addition of Cumate, 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.

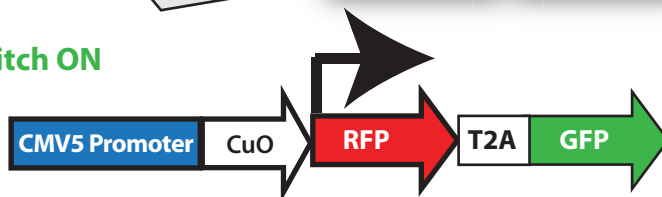
### Cumate Switch OFF



+ Cumate



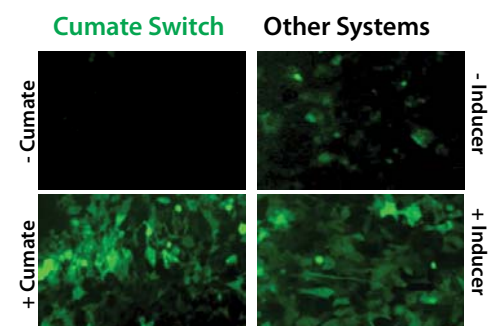
### Cumate Switch ON



## Highlights

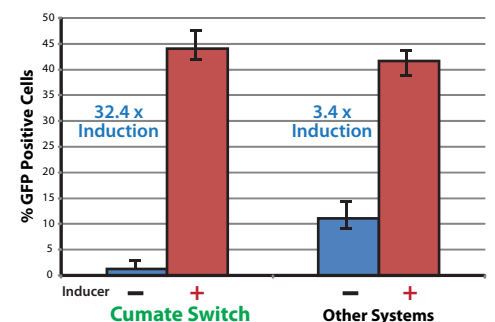
- Enhanced Cumate Operator (CuO) elements regulate the potent CMV5 promoter
- Extremely low background with robust Cumate-On induction
- Track induction with co-expressed RFP or GFP markers
- Easy to titrate level of induction with cumate solution
- Switch ON -> Turn OFF -> Switch ON again capabilities
- No special media or conditions required, plug and play system

## Tight regulation of induction



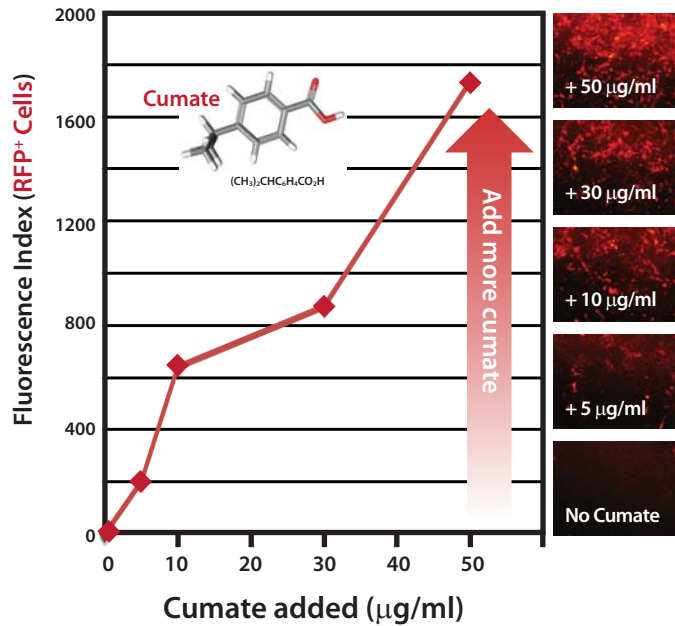
## Lower background than other inducible systems with robust induction

The SparQ cumate 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 cumate switch system a better choice. A variety of SparQ inducible lentivector configurations and CymR formats are available to customize your induction experiments.

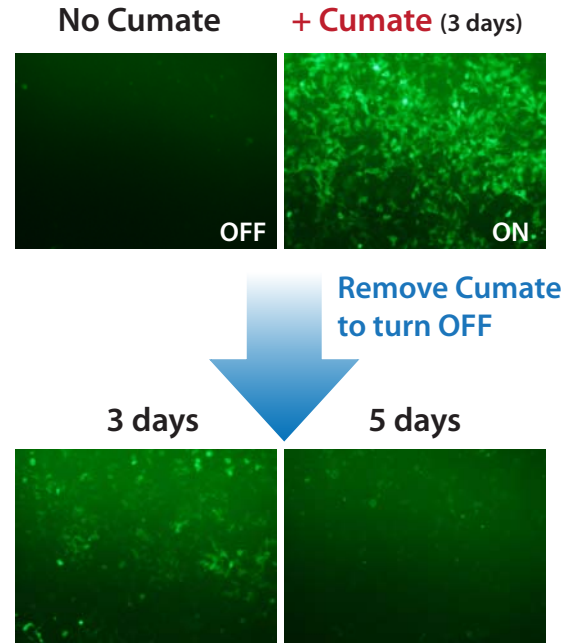


# SparQ™ Cumate Switch Inducible Lentivector System

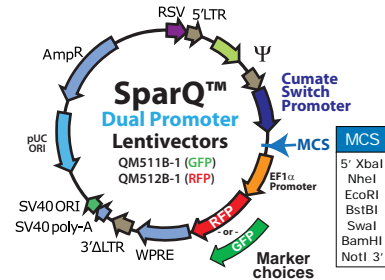
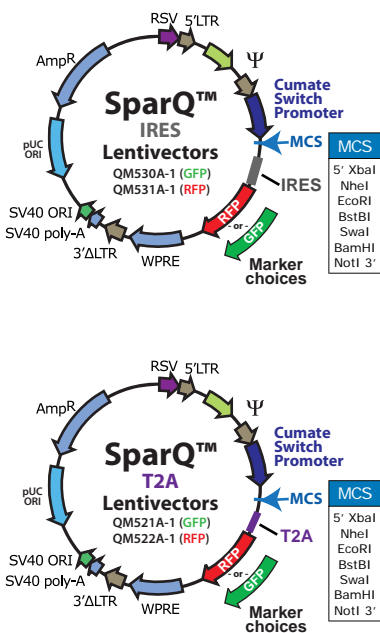
## Dynamic Ability to Fine-tune Expression Induction



## Turn ON -> Switch OFF -> and ON again

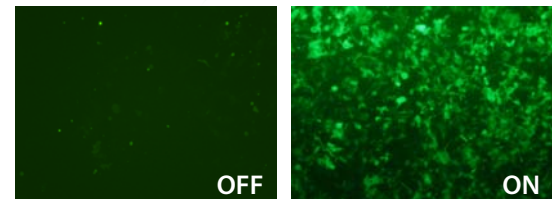


## Choose from a Variety of Inducible Configurations

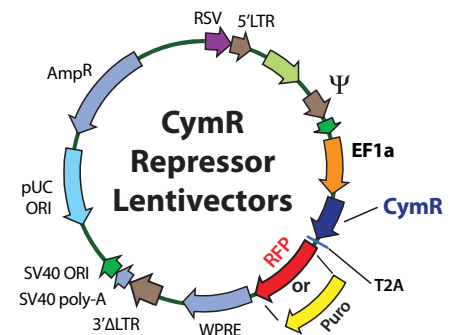


Custom cumate switch lentivector constructs also available!

## 6 days + Cumate Again (4 days)



## Select a CymR Format for your Studies



## 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](http://www.systembio.com/service) or call us at 888-266-5066.



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