Docket #: S12-225

Reversal of phiC31 integrase recombination in mammalian cells

Applications

- Genetic engineering of animal and plant cells and eukaryotic microbes. Construction of transgenic organisms.

Advantages

- Previously, phiC31 integrase could only be used in the forward direction, for insertion of DNA. With this discovery, the integrase reaction can also be run in reverse, for example to excise integrated sequences from the genome. The integration and excision reactions are each unidirectional, so direction can be controlled, unlike resolvase systems such as Cre or FLP, which are bidirectional.

Innovators

- Christopher Chavez
- Alfonso Farruggio
- Michele Calos
- Carlos Mikell

Licensing Contact

Sam Rubin

Licensing Associate, Life Science

Email