

Regulatable Transcription Cassettes or the "SIN-RetroTet Vector"

Regulatable expression constructs are provided, which allow for reversible transcription of a gene of interest in response to tetracycline (tet). The expression cassette may be introduced into a eukaryotic host and integrated into the chromosome with a retroviral vector, or by homologous recombination, conveniently using recA, as bare DNA for random integration or for extrachromosomal maintenance as plasmids, or the like.

Applications

- Allows rapid delivery of inducible genes, should have broad applications to cultured cells, transgenic animals, gene therapy.

Advantages

- Using a retrovirus to introduce the cassette allows transfer into cell types that are difficult to transfect - therefore, populations of thousands of cells, rather than a few clones, can be isolated and characterized within weeks.
- Vector is self-inactivating (SIN) - eliminating transcription from the strong retroviral LTR enhancer after infection.

Innovators

- Helen Blau
- Garry Nolan
- Andreas Hofmann

Licensing Contact

Brenda Martino

Biological Materials Specialist

[Email](#)