



Caliper Discovery Alliances & Services introduces GENESIS™



Virally mediated isogenic gene targeting

Would your research benefit from?

- ▶ Genetically-defined human cell lines
- ▶ Matched 'disease' vs. 'normal' cell-line pairs
- ▶ Patient-relevant disease models

Then you need GENESIS™

- ▶ High-efficiency targeting via homologous recombination
- ▶ Alter any endogenous genomic-sequence, clearly & stably
- ▶ Gene 'knock-ins' (function gain) or 'knock-outs' (function loss)

pBCATN

Old plasmid based vectors for targeted homologous recombination

FREQUENCY: up to 1%

NEW

pAAV-BCATN

AAV-based vectors packaged into AAV particles

FREQUENCY: up to 25%

Insertion into Exon 3

AWARD-WINNING TECHNOLOGY

MEDICAL FUTURES AWARD
INNOVATION IN CANCER
2008

Davies and Hirata: patents granted and pending Burtz et al., NAR 33(18) 2005

Features and Applications

- | | |
|--|---|
| ▶ Single and multiple gene alterations | ▶ Developing 'patient-relevant' disease models |
| ▶ Recapitulate any disease mutation/SNP | ▶ Detailed and definitive functional genomics |
| ▶ Reference to a matched normal background | ▶ Accelerate target, biomarker and drug discovery |
| ▶ Stable targeting of 'endogenous' genes | ▶ Pathway analysis and systems biology tools |

POWERED BY GENESIS™

- Custom Cell-line Generation
- Project In-licensing Program
- Targeting Cancer Consortium
- **X-MAN™** Cell-lines

X-MAN™ mutant and normal isogenic human cell-lines



CALL CALIPER DISCOVERY ALLIANCES & SERVICES TODAY

Please call CDAS +1 410 712 4410 or send an e-mail to CDASinvitro@caliperLS.com to discuss your specific research and development needs.