TECHNOLOGY

Targeted Conditional Expression of Proteins to Cell-Type

OVERVIEW

Mitochondrial dysfunction has been implicated in the pathogenesis of a plethora of neurodegenerative disorders (e.g., stroke, Parkinson's, amyotrophic lateral sclerosis, Huntington's, Alzheimer's, etc.). However, effective models useful for elucidating mechanisms and therapies associated with neuronal mitochondrial dysfunction are lacking. This invention describes a method that allows an in vivo, conditional, and cell- type specific expression of mitochondrially-targeted proteins.

APPLICATIONS

Drug discovery
Validation studies
Research tool to identify the role of cell-type specific mitochondrial dysfunction

ADVANTAGES

-Provides a transgenic animal model that can be used to develop drugs that target specific neuronal mitochondrial populations.
-Provides a transgenic animal model that can be used to screen small molecules or compounds that promote neuronal mitochondrial protection

STAGE OF DEVELOPMENT

A non-human transgenic animal model has been made that allows for the identification of mitochondria in a specific cell type

R&D REQUIRED

N/A

LICENSING POTENTIAL

UM seeks to develop and commercialize by an exclusive or non-exclusive license agreement and/or sponsored research with a company active in the area

CONTACT INFO

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Additional Information

INSTITUTION

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PATENT STATUS

Patent pending.

CATEGORIES

- Research Tools, Antibodies, & Reagents

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KC-2006-026