INNOVATION PARTNERSHIPS
UNIVERSITY OF MICHIGAN

A Transgenic Rabbit Model of Dravet Syndrome

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Research Tools and Reagents
Life Sciences

Inventor
Lori Isom

Further information
John Corthell
corthell@umich.edu

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OVERVIEW

Transgenic large animal model

- Model of developmental and epileptic encephalopathy

INNOVATION

Dravet syndrome (DS) is a severe developmental and epileptic encephalopathy caused by variants in the gene SCN1A that result in haploinsufficiency of the voltage-gated sodium channel alpha subunit, Nav1.1. DS patients develop severe seizures of multiple etiologies during the first year of life. They also have a high risk (up to 20%) of sudden unexpected death in epilepsy (SUDEP). The median age of SUDEP in DS patients is approximately 4 years. To our knowledge, this is the first transgenic large animal model of developmental and epileptic encephalopathy.