Drug Discovery & Development

Cell Line Stably Expressing the Human Heart Sodium Channel Beta1 Subunit

WARF: P03206US

Inventors: Jonathan Makielski, Bin Ye, Carmen Valdivia

The Wisconsin Alumni Research Foundation (WARF) is seeking commercial partners interested in a stably transfected cell line expressing the beta1 subunit of the human heart sodium channel.

Overview

The human heart sodium channel beta1 subunit is a protein encoded by a single gene. It interacts with the alpha subunit to alter the functional properties of the channel.

The Invention

UW-Madison researchers have developed a stably transfected cell line expressing the beta1 subunit of the human heart sodium channel. The beta1 subunit was first cloned in the early 1990s. The researchers have now re-cloned this subunit and created a cell line that permanently expresses it.

Applications

- Drug testing and screening

Key Benefits

- Allows electrophysiological and pharmacological studies free from interference of other ion channels
- Only an alpha subunit needs to be transiently transfected into this cell line to conduct experiments with the combined subunits, saving the trouble and expense of co-transfection with both subunits

Additional Information

For More Information About the Inventors

- Jonathan Makielski

Tech Fields

- Drug Discovery & Development : Preclinical testing
- Research Tools : Cell lines

For current licensing status, please contact Jennifer Gottwald at jennifer@warf.org or 608-960-9854