Drug Discovery & Development

Human Heart Sodium Channel Beta1 Subunit (SCNB1)

WARF: P03207US

Inventors: Jonathan Makielski, Bin Ye

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

Overview

The human heart sodium channel beta1 subunit (SCNB1) is a protein encoded by a single gene. It interacts with the alpha subunit to alter the functional properties of the channel. In addition, SCNB1 is thought to be a cell adhesion molecule and may have multiple effects on other proteins.

The Invention

The beta1 subunit of the human heart sodium channel is now available as a biomaterial through WARF. SCNB1 was first cloned in the early 1990s. UW-Madison researchers have now re-cloned this subunit and created a cell line that stably expresses it.

Applications

- Drug testing and screening
- Determining which molecules interact with SCNB1

Key Benefits

- May be co-expressed with alpha subunits of the sodium channel to more faithfully capture normal sodium channel function for electrophysiological and pharmacological studies.

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