



Model for Stearoyl-CoA Desaturase Activity

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The Wisconsin Alumni Research Foundation is seeking commercial partners interested in a transgenic mouse model for the human SCD5 isoform.

Overview

Stearoyl-CoA desaturase (SCD) is the rate-limiting enzyme in the biosynthesis of monounsaturated fatty acids. Inhibitors of SCD may be useful as therapeutic agents for the treatment of diseases such as obesity and diabetes. Various isoforms of SCD exist and are expressed at different developmental stages or in different tissues.

The Invention

UW-Madison researchers have developed a transgenic mouse model for the human SCD5 isoform. This animal model is useful for screening the activity and substrate specificity of human SCD5, and for identifying compounds that may modulate SCD5.

Applications

- Discovery of SCD inhibitors, particularly SCD 5 inhibitors
- Development of potential therapeutics for obesity or diabetes

Key Benefits

- Transgenic mice exhibit greater than a three-fold increase in SCD activity in their livers, making liver microsomes well suited for screening potential SCD inhibitors

Tech Fields

- [Research Tools : Animal & disease models](#)

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