

AMPK activator O304, 3-in-1 Drug

O304 acts like “**Exercise in a Pill**”, is **anti-Diabetic** and induces **Brown Fat** which disposes of excess calories as heat

The benefits of physical activity on general health especially in elderly, makes it a desirable, yet elusive goal to identify orally active drugs that would mimic the effects of exercise on endurance and on metabolic and other diseases. Similarly, drugs that could stimulate the disposal of excess calories/fat in the absence of exercise would be helpful in combating the epidemic increase in obesity that is associated with a western diet and sedentary life style. The generation and/or activation of brown fat which instead of storing calories as fat disposes of excess calories as heat under non-exercise conditions would be an attractive approach to achieve this goal. Thirdly, a drug that could lower blood glucose levels and mitigate associated metabolic and cardiovascular co-morbidities in obese individuals suffering from the metabolic syndrome would be of great benefit.

Drugs that activate the **Metabolic Master Regulator AMPK** would in theory be able to simultaneously have all these beneficial effects.

Betagenon AB and **Baltic Bio AB** in collaboration, now announce the identification of a unique orally available and safe AMPK activator, **O304**, which exhibits all these beneficial effects in animals. When given orally, **O304** significantly enhances endurance in sedentary obese diabetic and aged normal mice defined as an increase in running distance to exhaustion. **O304** also promotes blood glucose disposal in diabetic mice. Moreover, in obese rats **O304** stimulates the generation of active brown fat cells which dispose of calories as heat recorded as a significantly increased body surface temperature at the back, without an increase in core body temperature. Thus, **O304** acts as a **3-in-1 drug** that would be expected to have synergistic beneficial effects in large populations of individuals affected by muscle weakness (sarcopenia), obesity or the metabolic syndrome either alone or in combination. **O304** has been selected as clinical candidate and will be subjected to IND-enabling GLP-tox studies.

Betagenon AB is a privately owned Swedish Biotechnology company focused on the development of small molecule AMPK activators for multiple indications.

Baltic Bio AB is a subsidiary of the investment company Fort Knox.

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