

Press release 8 June 2005



## **Arexis receives European patent on a novel target for diabetes treatment**

**GOTHENBURG, SWEDEN – 8 June 2005 – The drug development company Arexis AB announced today that it has received a European patent covering the skeletal muscle specific  $\gamma 3$  subunit of AMPK, representing an important part of Arexis' patent portfolio in the AMPK field. Arexis is currently developing a novel oral therapy based on a non-insulin dependent mechanism for type II diabetes, with AMPK as target.**

The granted patent – 'Variants of the gamma chain of AMPK, DNA sequences encoding the same, and uses thereof' – covers the skeletal muscle specific  $\gamma 3$  subunit of AMPK (Adenosine 5'-monophosphate-activated protein kinase). It will play an important role in Arexis' AMPK patent portfolio, which forms an umbrella under which further R&D relating to the function of AMPK, and especially the muscle specific  $\gamma 3$  subunit, can be performed. Even more importantly, this umbrella gives Arexis the unique and exclusive possibility to develop compounds that have specificity only for the  $\gamma 3$  subunit of AMPK, which is expected to offer the best chance to develop and commercialise effective and safe drugs with AMPK as target.

Arexis' focus in its AMPK program is the development of a novel oral therapy for type II diabetes.

"This patent helps us to further strengthen our leading position in the AMPK research field as well as the commercial potential in our type II diabetes project," says Lennart Hansson, CEO of Arexis.

The AMPK project originates from the outstanding finding of a novel muscle-specific form of AMPK identified by one of Arexis' founders, Professor Leif Andersson. Leif Andersson is Professor at the Department of Medical Biochemistry and Microbiology, Uppsala University and Guest Professor at the Department of Animal Breeding and Genetics at the Swedish University of Agricultural Sciences, Uppsala.

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## **Notes to editors:**

### **About Arexis**

Arexis is a privately owned drug development company with an attractive portfolio of projects ranging from preclinical to near commercial stages. Arexis focuses on development of drugs to treat metabolic and inflammatory diseases such as fat malabsorption, diabetes, atopic dermatitis and rheumatoid arthritis. These are areas with great unmet medical needs and largely unknown disease mechanisms. Arexis has a strong intellectual property and technology platform. The company was founded in 1999 and operates in custom-designed modern facilities in the Biotech Center in Göteborg, Sweden. For more information, please visit [www.arexis.com](http://www.arexis.com).

### **AMPK**

AMPK (Adenosine 5'-monophosphate-activated protein kinase) is a metabolic master switch by which cells sense changes in energy status and adapt to them. The enzyme regulates a number of central functions in different cell types. AMPK activity has been correlated with an increase in glucose uptake in skeletal muscle and the inhibition of glucose output in the liver. As a result, this kinase has emerged as a potential novel target for treatment of type II diabetes. The AMPK project originates from the outstanding finding of a novel muscle-specific form of AMPK identified by one of Arexis' founders, Professor Leif Andersson. This form has been shown in animal models to be a central regulator of glucose metabolism in skeletal muscle.

Arexis' AMPK  $\gamma 3$  agonist, which specifically targets skeletal muscle, will be a very good complement to, and work in synergy with, other anti-diabetic therapies.

### **Type II diabetes**

Type II diabetes (also known as non-insulin-dependent) accounts for around 90% of diabetes cases and results from the body's inability to respond properly to the action of insulin produced by the pancreas. Diabetes patients are at an increased risk for myocardial infarction, stroke, kidney disease, visual and neurological impairment.