

New compound for body weight regulation with applications in animal breeding

DESCRIPTION OF THE TECHNOLOGY

CSIC has developed a **modulating agent for regulating body weight**. Nowadays, it is necessary to develop new alternatives to increase the profitability of animal breeding and increase meat production, key factors to meet the food needs of the world population. Since weight and body fat are two important factors in reproductive maturity in animals, **it is necessary to find alternatives to regulate body weight to delay entry into puberty and avoid the cessation of the growth or fattening stage**. In this way we can obtain a higher profitability in the herds and **we can control more efficiently the growth of the animals**.

The modulating agent acts via the EGFR receptor in regulating body weight. So, if it produces the activation, it decreases the appetite and the food intake and, therefore, the decrease in body weight.

in contrast, inhibition of the EGFR pathway involves an increase in appetite and body weight.

By inactivating the EGFR pathway, it allows livestock to gain weight and delay their entry into adulthood. **Allowing the increase in the performance of animal breeding and having a higher production than the current techniques used in animal breeding.**

MARKET APPLICATION SECTORS

The field of application of the present invention is the industrial livestock sector.

TECHNICAL ADVANTAGES AND BUSINESS BENEFITS

The main innovative aspects of the new compound are:

- The modulating agent **allows to control the energy status, appetite and body weight**
- **Increases the yield in animal breeding.**
- It **allows to control the corporal weight** of both ways, diminishing it or increasing it.
- The EGFR receptor modulating agent can be used in farm animals such as: Birds, cow, pig, sheep, rabbit, goat, horse, llama, ox, bull and hare.
- The modulating agent for administration **can be comprised within a pharmaceutical composition.**

CURRENT STATE OF DEVELOPMENT

The research group has data on the action of the compound and **laboratory scale studies**.

COLABORATION SOUGHT

This technology is protected by patent application, with the **possibility of internationalization of the application worldwide**. Companies interested in acquiring this technology for commercial exploitation are sought through Patent license agreements.

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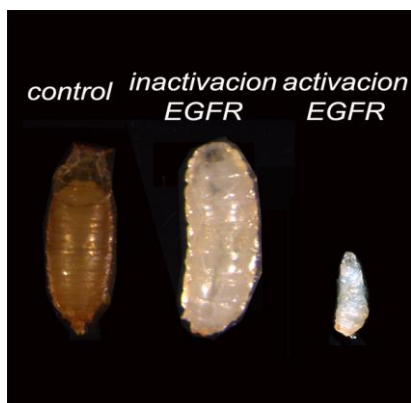


Image: Different stages of maturity and body size depending on the activation or not of the EGFR pathway.

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