

BIOTECHNOLOGICAL YEAST-BASED PRODUCTION OF VITAMIN B₂ (RIBOFLAVIN)



Areas of Application

Vitamin B₂ produced by microbial fermentation can be used for human and animal nutrition, as a food colorant, as well as a medicine

Specification

Riboflavin synthesizing strains have been constructed using advanced metabolic engineering methods. Medium composition and cultivation conditions have been optimized to maximize the yield of target product. A laboratory procedure for vitamin B₂ production has been developed

IPR Protection

IPR3, IPR5

Advantages

There are no counterparts in Ukraine. The constructed strains are characterized by efficient riboflavin production. The main advantage of these strains is a higher genetic stability relative as compared with available riboflavin producers. Biotechnological riboflavin production reduces energy consumption and chemical pollution of environment

Stage of Development.

Suggestions for Commercialization

IRL3, TRL4

The riboflavin producer cultivation is scaled and a technology for commercial production of vitamin B₂ is developed. The constructed riboflavin overproducing strains and the developed technology can saturate the Ukrainian market with the product. The Institute is seeking a company interested in strain commercialization

Contact Information

Oleh V. Stasyk, Institute of Cell Biology of the NAS of Ukraine;
+38 032 261 21 44, e-mail: stasyk@cellbiol.lviv.ua