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(71) Applicants: AGENCY FOR SCIENCE, TECHNOLOGY AND RESEARCH [SG/SG]; 1 Fusionopolis Way,

#20-10 Connexis North Tower, Singapore 138632 (SG). NATIONAL UNIVERSITY OF SINGAPORE [SG/SG]; 21 Lower Kent Ridge Road, Singapore 119077 (SG). CN-RS@CREATE [SG/SG]; 1 Create Way, #15-01, Create Tower, Singapore 138602 (SG). CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE [FR/FR]; 3 rue Michel-Ange, 75016 Paris (FR). INSTITUT NATIONAL DE RECHERCHE POUR L'AGRICULTURE, L'ALIMENTATION ET L'ENVIRONNEMENT [FR/FR]; 147 rue de l'Université, 75007 Paris (FR). INSTITUT NATIONAL DES SCIENCES APPLIQUÉES DE TOULOUSE (INSA TOULOUSE) [FR/FR]; 135 avenue de Rangueil, Cedex 4, 31077 Toulouse (FR).

(72) Inventors: CHEN, Xixian; 61 Biopolis Drive, Proteos level 4, Singapore 138673 (SG). SHARMA, Deepti; CN-RS@CREATE, 1 Create Way, #15-01, Create Tower, Singapore 138602 (SG). YEW, Wen Shan; c/o National University of Singapore, Yong Loo Lin School of Medicine / Department of Biochemistry, 21 Lower Kent Ridge Road, Singapore 119077 (SG). XUE, Bo; c/o National University of Singapore, Yong Loo Lin School of Medicine / Department of Biochemistry, 21 Lower Kent Ridge Road, Singapore 119077 (SG). ANDRE, Isabelle; 135 rue de Rangueil, Cedex 4, 31077 Toulouse (FR). BOZONNET, Sophie; 135 rue de Rangueil, Cedex 4, 31077 Toulouse (FR). REMAUD-SIMEON, Magali; 135 rue de Rangueil, Cedex 4, 31077 Toulouse (FR). ESQUE, Jérémy; 135 rue de Rangueil, Cedex 4, 31077 Toulouse (FR).

(74) Agent: SPRUSON & FERGUSON (ASIA) PTE LTD;

P.O. Box 1531, Robinson Road Post Office, Singapore 903031 (SG).

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(54) Title: METHODS FOR IMPROVING PRODUCTION OF NATURAL KETONES

(57) Abstract: The invention relates to a cell-based method of identifying one or more enzyme variants that produces an increased level of a ketone. The method of the invention involves incubating cells comprising a vector encoding one or more enzyme variants with para-methox-2-amino benzamidoxime, measuring the signal emitted and comparing the signal to cells comprising a vector encoding a reference enzyme. A system for identifying one or more enzyme variants, and genetically engineered enzyme variants that produce increased levels of a ketone are also disclosed.



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