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(54) **DIACYLGLYCEROL O-ACYLTRANSFERASE**

DIACYLGLYZERIN O-ACYLTRANSFERASE

DIACYLGLYCEROL O-ACYLTRANSFERASE

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Note: Within nine months from the publication of the mention of the grant of the European patent, any person may give notice to the European Patent Office of opposition to the European patent granted. Notice of opposition shall be filed in a written reasoned statement. It shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

**EP 1 088 088 B8**

- KWANYUEN P ET AL: "SUBUNIT AND AMINO ACID COMPOSITION OF DIACYLGLYCEROL ACYLTRANSFERASE FROM GERMINATING SOYBEAN COTYLEDONS" *BIOCHIMICA ET BIOPHYSICA ACTA*, AMSTERDAM, NL, vol. 1039, no. 1, 31 May 1990 (1990-05-31), pages 65-72, XP000884516 ISSN: 0006-3002
- KWANYUEN P; WILSON RF: "N-terminal sequence of the 40.8 kDa subunit of diacylglycerol acyltransferase from soybean" *PLANT PHYSIOLOGY*, vol. 96, no. 1 SUPPL, May 1991 (1991-05), page 125 XP002268383 ISSN: 0032-0889
- CASES S ET AL: "Identification of a gene encoding an acyl CoA: diacylglycerol acyltransferase, a key enzyme in triacylglycerol synthesis" *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA*, NATIONAL ACADEMY OF SCIENCE. WASHINGTON, US, vol. 95, no. 22, 27 October 1998 (1998-10-27), pages 13018-13023, XP002122745 ISSN: 0027-8424
- FRENTZEN M (REPRINT): "Acyltransferases from basic science to modified seed oils" *FETT - LIPID*, WILEY-VCH VERLAG, WEINHEIM, DE, vol. 100, no. 4/5, May 1998 (1998-05), pages 161-166, XP002122744 ISSN: 0931-5985
- CASES S. et al., "Cloning and Expression of a Candidate Gene for Diacylglycerol Acyltransferase", *FASEB J.*, 20 March 1998, Vol. 12, No. 5, page A814, Abstract 4718, XP002915658
- ANDERSSON M. et al., "Purification of Diacylglycerol: Acyltransferase from Rat Liver to Near Homogeneity", *JOURNAL OF LIPID RESEARCH*, 1994, Vol. 35, pages 535-545, XP002915656
- KATAVIC V. et al., "Alteration of Seed Fatty Acid Composition by an Ethyl Methanesulfonate-Induced Mutation in *Arabidopsis thaliana* Affecting Diacylglycerol Acyltransferase Activity", *PLANT PHYSIOLOGY*, 1995, Vol. 108, pages 399-409, XP002915657