

Title (en)

HUMAN CALCIUM SENSOR PROTEIN, FRAGMENTS THEREOF AND DNA ENCODING SAME

Title (de)

HUMANES "CALCIUM SENSOR" PROTEIN, FRAGMENTE DAVON UND DNA WELCHE DIESES KODIERT

Title (fr)

PROTEINE HUMAINE DETECTRICE DU CALCIUM, FRAGMENTS DE CETTE PROTEINE ET ADN CODANT POUR ELLE

Publication

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Application

EP 95941448 A 19951122

Priority

- US 9515203 W 19951122
- US 34483694 A 19941123
- US 48731495 A 19950607

Abstract (en)

[origin: WO9615801A1] The present invention relates to the isolation of a cDNA clone encoding the calcium sensor in human placenta and subsequent Northern blots confirming the mRNA expression also in human parathyroid and kidney tubule cells. Close sequence similarity is demonstrated with the rat Heymann nephritis antigen, a glycoprotein of the kidney tubule brush border with calcium binding ability. Immunohistochemistry substantiates a tissue distribution of the calcium sensor protein similar to that previously described for the Heymann antigen. It is proposed that the identified calcium sensor protein constitutes a universal sensor for recognition of variation in extracellular calcium, and that it plays a key role for calcium regulation via different organ systems. The calcium sensor protein belongs to the LDL-superfamily of glycoproteins, claimed to function primarily as protein receptors, but with functionally important calcium binding capacity.

IPC 1-7

A61K 38/16; **A61K 48/00**; **C07H 21/04**; **C07K 5/04**; **C07K 5/10**; **C07K 7/06**; **C07K 7/08**; **C07K 14/435**; **C12N 5/10**; **C12N 15/11**; **C12N 15/12**

IPC 8 full level

C07K 14/705 (2006.01)

CPC (source: EP)

C07K 14/705 (2013.01)

Citation (search report)

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- [T] WO 9744050 A1 19971127 - RHONE POULENC RORER PHARMA [US], et al
- [X] LUNDGREN S ET AL: "A protein involved in calcium sensing of the human parathyroid and placental cytotrophoblast cells belongs to the LDL-receptor protein superfamily.", EXPERIMENTAL CELL RESEARCH. UNITED STATES JUN 1994, vol. 212, no. 2, June 1994 (1994-06-01), pages 344 - 350, XP001097795, ISSN: 0014-4827
- See references of WO 9615801A1

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