

US 20130137140A1

(19) United States

(12) Patent Application Publication

Callewaert et al.

(10) **Pub. No.: US 2013/0137140 A1**(43) **Pub. Date:** May 30, 2013

(54) INCREASED PROTEIN EXPRESSION THROUGH INCREASED MEMBRANE FORMATION

- (75) Inventors: Nico L.M. Callewaert, Nevele (BE); Mouna Guerfal, Veltem-Beisem (BE)
- (73) Assignees: UNIVERSITEIT GENT, Gent (BE); VIB VZW, Gent (BE)
- (21) Appl. No.: 13/704,973

(2), (4) Date:

- (22) PCT Filed: Jun. 15, 2011
- (86) PCT No.: **PCT/EP2011/059959** § 371 (c)(1),
- (30) Foreign Application Priority Data

 Jun. 17, 2010 (EP) 10166271.6

Feb. 5, 2013

Publication Classification

(51) **Int. Cl.** *C12N 15/81* (2006.01) *C12P 21/00* (2006.01)

(57) ABSTRACT

The present application relates to the field of protein expression technologies. More specifically, it is demonstrated that cells with increased levels of phosphatidic acid, which can be achieved through either or both of phosphatidic acid inhibition and diacylglycerol kinase overexpression, display increased membrane formation from which increased levels of proteins can be recovered.