

Title (en)  
METHODS FOR IMPROVED PRODUCTION AND RECOVERY OF RECOMBINANT PROTEINS FROM EUKARYOTIC CELL CULTURES

Title (de)  
VERFAHREN ZUR VERBESSERTEN HERSTELLUNG UND GEWINNUNG REKOMBINANTER PROTEINE AUS EUKARYOTISCHEN ZELLKULTUREN

Title (fr)  
PROCÉDÉS PERMETTANT D'AMÉLIORER LA PRODUCTION ET LA RÉCUPÉRATION DE PROTÉINES RECOMBINANTES PROVENANT DE CULTURES DE CELLULES EUCARYOTES

Publication  
**EP 2943582 A1 20151118 (EN)**

Application  
**EP 14738023 A 20140110**

Priority

- US 201361751063 P 20130110
- US 201361889922 P 20131011
- US 2014011139 W 20140110

Abstract (en)  
[origin: WO2014110440A1] The present disclosure is directed to methods to improve the yields of proteins recombinantly produced in eukaryotic cells comprising the addition of anionic substances such as valproate, malate, succinate, fumarate, citrate (e.g., ferric citrate), polyanionic compounds (e.g., polysulfated compounds such dextran sulfate or polyvinyl sulfate), and combinations thereof, wherein the addition of such compounds reduces the binding of recombinant proteins to the cell surface, therefore increasing the amount of soluble protein that can recovered from the culture medium. In addition, the protein yields can be improved according to the disclosed methods by preventing or reducing cell growth inhibition caused by the binding of the expressed recombinant proteins (e.g., neublastin, or antibodies or antigen-binding fragments thereof) to the cell surface. The disclosed anionic substances can also be used during the harvesting phase of a protein production process to release the expressed recombinant proteins from the cell surface prior to protein purification.

IPC 8 full level  
**C12P 21/04** (2006.01); **C12N 5/00** (2006.01); **C12N 5/07** (2010.01)

CPC (source: EP)  
**C12N 1/38** (2013.01); **C12N 5/0037** (2013.01); **C12P 21/02** (2013.01); **C12N 2500/12** (2013.01); **C12N 2500/24** (2013.01); **C12N 2500/30** (2013.01); **C12N 2500/32** (2013.01); **C12N 2500/50** (2013.01); **C12N 2500/60** (2013.01); **C12N 2501/065** (2013.01); **C12N 2501/90** (2013.01); **C12N 2510/02** (2013.01)

Citation (search report)  
See references of WO 2014110440A1

Cited by  
CN110438066A

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2014110440 A1 20140717**; EP 2943582 A1 20151118

DOCDB simple family (application)  
**US 2014011139 W 20140110**; EP 14738023 A 20140110