

# PBL NEWS



### **DDA1** gene published in Plant Cell

Vicente Rubio and coworkers at the CSIC Centro Nacional de Biotechnologia in Madrid have published their work characterising how DDA1, the Ubiquitin Ligase substrate adaptor, mediates the targeted degradation of ABAreceptors. The Plant Cell article can be found <a href="here">here</a>. This finding opens the way to use DDA1 expression to enhance crop productivity under conditions of both mild and more severe abiotic stress. PBL is managing patent applications on DDA1 and while some commercial rights have already been granted, rights for some crops are still available.





For more information, please contact Dr Jan Chojecki (ajsc@pbltechnology.com).

PBL Tech ID: 12.548

# Nitrate / Proton Transporter Gene Technology for enhanced nitrogen use / metabolism and crop yield now licensed for selected crops



PORICULTURAL

John Innes Centre

Researchers at John Innes Centre and Nanjing Agricultural University have discovered a gene from rice that enhances nitrogen use, optimally balancing plant pH, and boosts crop yield, as demonstrated in field trials of transgenic rice. PBL has granted commercial rights under its patent applications on this technology for use in corn, soybeans, oil-seed rape/canola and wheat. Rights are still available for all other crops.

For more information, please contact Dr Jan Chojecki (ajsc@pbltechnology.com).

PBL Tech ID: 12.546

## Bread for Coeliacs? New publications in PloS One

Francisco Barro and colleagues at the CSIC Institute for Sustainable Agriculture, Spain, have published their most recent work on wheats from which the proteins causing Coeliac Disease and related gluten pathologies have been removed. The papers which are published in PloS One are entitled:

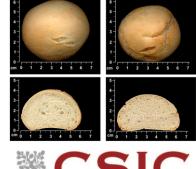
Reduced-Gliadin Wheat Bread: An Alternative to the Gluten-Free Diet for Consumers Suffering Gluten-Related Pathologies

The Shutdown of Celiac Disease-Related Gliadin Epitopes in Bread Wheat by RNAi Provides Flours with Increased Stability and Better Tolerance to Over-Mixing

 $PBL is \, managing \, the \, commercial \, development \, of \, this \, important \, innovation.$ 

For more information, please contact Dr Jan Chojecki (ajsc@pbltechnology.com)

PBL Tech ID: <u>10.512</u>





#### miRNA resistant GRF3: Plant growth technology published in Plant Journal

Javier Palatnik and colleagues at the CONICET Institute of Molecular and Cellular Biology, at the University of Rosario, Argentina have published their findings that modifying GRF3, a plant Growth Regulatory Factor, to make it insensitive to repression by mi396, allows a boost to cell proliferation leading to increased plant growth and plant productivity. The rGRF3 technology is available for licensing from PBL. Rights for some crops are still available.

Debenardi et al (2014) Post-transcriptional control of GRF transcription factors by microRNA miR396 and GIF co-activator affects leaf size and longevity.  $\underline{Plant J}$ . 2014 May 28. doi: 10.1111/tpj.12567.

For more information, please contact Dr Jan Chojecki (ajsc@pbltechnology.com).

PBL Tech ID: 10.511











IP protection

Funds and manages patent filing and prosecution

Builds complementary technology packages

Markets technology to commercial users

Concludes and monitors technology licences

Manages and mentors the formation of new technologybased businesses



# **Innovation in life sciences**







# PBL NEWS



## New vaccine technologies for challenging diseases available

PBL is offering commercial rights for exciting new vaccine technologies from the CSIC Centro Nacional de Biotecnologia, Madrid, Spain. The first patented vaccine candidate that will be available targets the very challenging disease, Hepatitis C and PBL is now seeking a development partner to bring it into use.

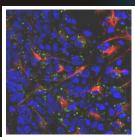


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For more information, please contact Dr Martin Stocks (martin@pbltechnology.com).

PBL Tech ID: 14.575

## Stem Cell stimulant: A new therapeutic approach for Multiple Sclerosis?



PBL has granted evaluation rights to a commercial partner for the evaluation of a peptide-based intervention that stimulates the production of oligodendrocytes from neural stem cells. The technology, developed at the University of Coimbra, Portugal, has applications in the development of new therapies for demyelinating diseases such as multiple sclerosis.

For more information, please contact Dr Martin Stocks (<u>martin@pbltechnology.com</u>).

PBL Tech ID: 11.519

### **Patent News**

PBL's patent attorneys in UK and associates around the world have been hard at work prosecuting patent applications on our portfolio of technologies in the plant, ag and other life sciences. In recent weeks the following patents have been issued or given notice of grant:

#### Enhanced root hair growth

Notice of Allowance in Europe: Patent Application No. 08736917.9. Contact: Dr Jan Chojecki (ajsc@pbltechnology.com). PBL Tech ID: 00.244



#### HT-CPMV system for high-level protein production in plants

Granted in USA: US 8,674,084. Notice of Allowance in Australia: Patent Application No: 2009203609.

Recent news articles: Jul 2013 / Mar 2012

Contact: Dr Lars von Borcke (lars@pbltechnology.com). PBL Tech ID: 07.439

#### Plant temperature response

Notice of Grant in Australia: Patent Application No. 2010340802. Contact: Dr Jan Chojecki (ajsc@pbltechnology.com). PBL Tech ID: 09.496

#### Potato late blight resistance gene

Notice of Allowance in China: Patent Application No. 2008/80108132.9. Notice of Allowance in Ukraine: Patent Application No. A201001391. Contact: Dr Lars von Borcke (lars@pbltechnology.com). PBL Tech ID: 07.425

THE SAINSBURY LABORATORY



#### Dynamic Gastric Model - the "Model Gut"

Notice of Allowance in Europe: Patent Application No. 10008863.2. To Issue in Canada: PatentApplication Number 2613980. Contact: Dr Martin Stocks (martin@pbltechnology.com). PBL Tech ID: 02.301

#### HaHB1 gene for enhanced plant yield and tolerance to abiotic stress Granted in Australia: AU 2010255488

Contact: Dr Jan Chojecki (ajsc@pbltechnology.com). PBL Tech ID: 08.465







#### FT mutants with increased flowering and yield

Notice of Allowance in Australia: PatentApplication No. 2011222740. Contact: Dr Jan Chojecki (ajsc@pbltechnology.com). PBL Tech ID: 10.497

Wheat with reduction of specific gliadin proteins responsible for Coeliac Disease and other gluten-related pathologies

Notice of Allowance in USA: Patent Application No. 13/147151. Contact: Dr Jan Chojecki (ajsc@pbltechnology.com). PBL Tech ID: 10.512





# Innovation in life sciences

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