

9 INDUSTRY, INNOVATION  
AND INFRASTRUCTURE



# SDG 9

INDUSTRY, INNOVATION  
AND INFRASTRUCTURE





## RESEARCH BY NUMBER (2019–2023)



PUBLICATION  
**250**



CITATION IMPACT  
**0.94**



CITATION COUNT  
**1,465**



BROCHURE DOWNLOAD

## **UPpro** Real-time PCR PORCINE DETECTION KIT

The UPpro Real-time PCR PORCINE DETECTION KIT is designed for qualitative detection of porcine\* in samples.

\**Sus scrofa* (wild boar) and *Sus scrofa domestica* (pig)



Real-time based testing,  
without electrophoresis



Fast results interpretation  
and workflow process



Accurate, specific and  
sensitive detection results



Multiplex test system for  
variety of samples

Manufactured by :



**PT Prodia Diagnostic Line**

Kawasan Industri Jababeka III

Jl. Tekno 1 Blok C2 D-E-F, Cikarang, West Java 17530 - INDONESIA

#### Catalog No.

#### Content

42001

50 reactions

42002

100 reactions

## KIT CONTENT

- 2x Probe Mastermix
- Primer 1 (Target)
- Primer 2 (Target)
- Probe 1 (Target)
- Probe 2 (Internal control)
- Nuclease Free Water
- Negative Control
- Positive Control
- Instruction for Use

## PRODUCT INFO & ORDER CONTACT

M. +62 815-1359-2626

E. [marketing@proline.co.id](mailto:marketing@proline.co.id)

W. [www.proline.co.id](http://www.proline.co.id)

# UPRO REAL TIME PCR PORCINE DETECTION KIT

UPro – Porcine Detection Kit product is a result of research from PHARCI in collaboration with Proline. Proline stands for Prodia Diagnostic Line, a business unit of Prodia Group engaged In Vitro Diagnostic (IVD) industry. Porcine is a scientific term to refer to pigs or to describe anything that resembles a pig. Porcine detection is one of the testing methods for pig contamination detection in food, cosmetics, and toiletries products that use pig derivatives, such as enzymes, gelatine, lard, and pork oil. Porcine is a remarkable substitution of pigs, blood clots, organs in pig animals, and food processing plants that use derivatives from pigs. The porcine detection kit contains reagents and materials for the extraction and isolation of DNA. The system itself uses Real-Time PCR (qPCR), which is a molecular technique with the basic mechanism of replication of DNA using enzymes, thus the amount of DNA inside the sample is able to be quantified. Real-time PCR has been used widely for detecting pig contamination inside food, cosmetics, and medication products. This method is proven to be valid, quick, and sensitive enough to detect the DNA of pigs contained in the products even in a small amount.

# HIGH FLOW NASAL CANNULA (HFNC)

HFNC is a breathing device used to provide additional oxygen to patients with respiratory disorders. Dr. Reza Widiyanto Sudjud, dr. M. Kes., sp. An innovative product is used for neonatal patients or infants with respiratory disorders, such as acute respiratory distress syndrome (SGPA) or prematurity. This device is the first in Indonesia to meet international standards for HFNC products. This product has several advantages compared to conventional HFNC products, such as smaller size, easier to use, and better efficiency in delivering oxygen.

The availability of this product can help reduce the risk of death due to respiratory disorders in infants and neonates, as well as improve their quality of life. It is hoped that more hospitals and clinics will be able to provide better care for infants who need intensive respiratory care.



## VARIOUS OTHER INNOVATIVE PRODUCTS

### SCREEN PRINTED ELECTRODE

Screen printed electrode (SPE) is an electrode strip that contains three electrode lines: working electrode, reference electrode, and counter electrode.



**TransGENE**  
Reagen Transfeksi DNA



## INNOVATION AND TECHNOLOGY EXHIBITION AT UNIVERSITAS PADJADJARAN

Universitas Padjadjaran held a Technology and Innovation Exhibition in the framework of the 36th PIMNAS on November 27–30, 2023, at the Futsal Field, Bale Santika. Carrying the theme "With Technology and Creativity for Advanced Indonesia," this exhibition focuses on sustainable technology with high innovation that has an impact on Indonesia's progress. This event is open to the public and showcases innovative products from various PIMNAS participating universities. This exhibition is a place to share information about innovative technologies produced throughout Indonesia, with award categories such as the Most Innovative, Creative, and Favourite Stands.



Most Innovative, Creative, and Favourite Stands.

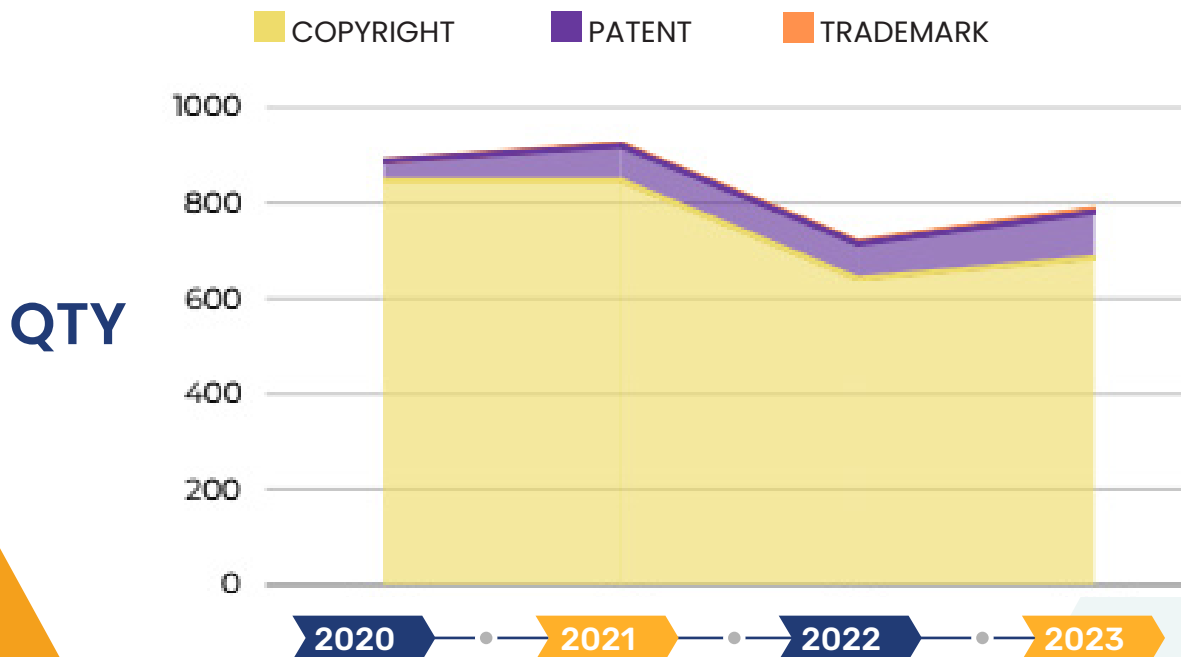
- |   |                                             |                                        |
|---|---------------------------------------------|----------------------------------------|
| 1 | PTI 27<br>Blustru fruit<br>activated carbon |                                        |
| 2 | PTI 05<br>HERO                              | 5 PTI 19<br>Inovkor Unpad<br>Raw Ramie |
| 3 | PTI 37<br>Gensystem                         | 6 SORASI                               |
| 4 | PTI 28<br>Probiotic Spray                   | 7 Inovkor Unpad<br>Care Puspa          |
|   |                                             | 8 Mentalku<br>Merdeka                  |

## DEVELOPMENT OF INTELLECTUAL PROPERTY RIGHTS AND UNPAD INNOVATION PRODUCTS

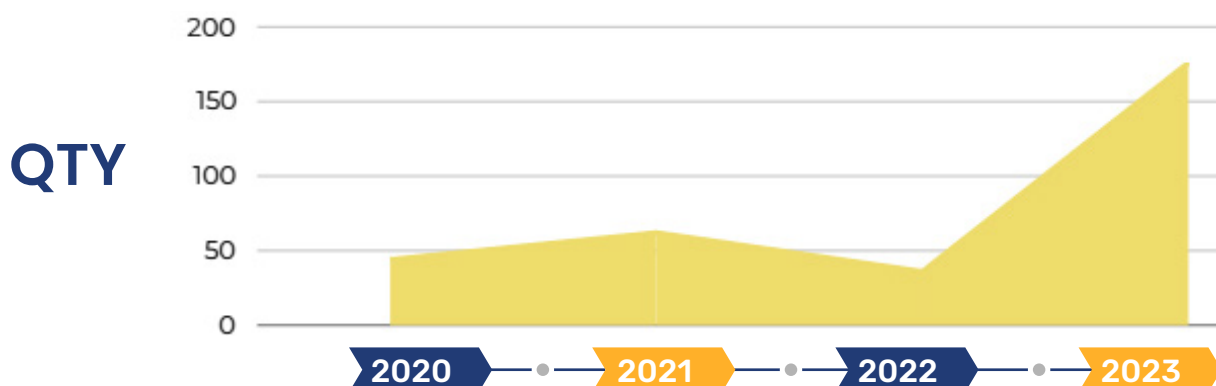


Universitas Padjadjaran continues to encourage the acceleration of research, innovation, and downstream carried out by academics. In addition to increasing scientific publications, Unpad focuses on downstream research by building an ecosystem that supports a clear research direction. Innovation is not only limited to the development of technology or tools but also includes community service products, policy recommendations, and innovative models. Unpad actively collaborates with industry, government, and higher education institutions both at home and abroad. In 2023, there were 176 products that had been downstreamed, with a total of 318 cumulative innovations from 2020 to 2023.

### DEVELOPMENT OF INTELLECTUAL PROPERTY RIGHTS CHARTS



## UNPAD INNOVATION PRODUCTS CHARTS



In addition, in 2023, as many as 16 teams consisting of lecturers from Universitas Padjadjaran received funding to collaborate with Industry through the Kedaireka Matching Fund Program funding scheme, a program from the Ministry of Education, Culture, Research, and Technology. This program has research priorities for Indonesia's economic transformation, namely Green Economy, Blue Economy, Digital Economy, Strengthening Tourism, and Health Independence. Through this program, lecturers, including those at Universitas Padjadjaran, are given the opportunity to collaborate to be able to produce creative works that are solution-oriented and innovative amidst the needs and challenges of society.

## 2023

