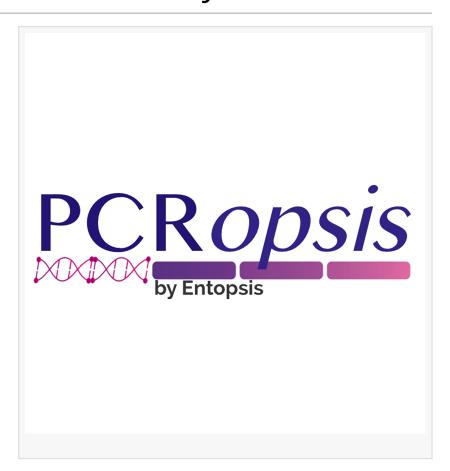


PCRopsis™ Next Generation Direct PCR™ Technology is Compatible with Isothermal PCR and may Improve Test Sensitivity

MIAMI, FLORIDA, USA, July 22, 2021 /EINPresswire.com/ -- Entopsis

PCRopsis™ Reagent RVD-RT facilitates and may improve the sensitivity of isothermal PCR amplification of SARS-CoV-2 from transport medium without the need for specialized equipment, like a thermal cycler.

Isothermal PCR, a process where a thermal cycler is not needed for DNA amplification, allows for fast, point of care detection of infectious diseases and other disorders. This approach often requires isolated RNA or DNA to achieve optimal results. However, the process of nucleic acid isolation negates some of the advantages offered by isothermal PCR.



Here we announce completion of a <u>preliminary study</u> demonstrating PCRopsis™ Reagent RVD-RT replaces traditional nucleic acid isolation for the detection of SARS-CoV-2 through reverse transcription loop-mediated isothermal amplification (RT-LAMP), a type of isothermal PCR where the starting material is RNA. Moreover, this study indicated that PCRopsis™ Reagent RVD-RT



This opens the door for our technology to play a central role in the isothermal PCR diagnostic space."

Obdulio Piloto, Ph.D.

might improve the sensitivity of RT-LAMP by 6-fold. Future studies will decipher the mechanism for this improvement in test sensitivity. If confirmed for other applications, this improvement in sensitivity will have a significant impact on numerous isothermal PCR diagnostic test kits.

PCRopsis™ Reagent RVD-RT is a Next Generation Direct PCR™ reagent previously shown to facilitate nucleic acid

extraction-free amplification of viral and bacterial gene targets in 10 minutes at room temperature without equipment. This new technology proved superior to products utilizing traditional direct PCR approaches and offers results comparable to RNA / DNA isolation.

"We now have conclusive evidence that our Next Gen Direct PCR™ technology is compatible with isothermal PCR, and may even meaningfully improve test sensitivity. This opens the door for our technology to play a central role in the isothermal PCR diagnostic space." said Obdulio Piloto, Ph.D., CEO of Entopsis.

About Entopsis

Entopsis was founded in 2011. It has researched and developed a number of proprietary platforms in the areas of material science, nanotechnology, chemistry, and machine learning. The company utilizes this unique know-how to solve key scientific problems, particularly for medical diagnostics. Entopsis is predominantly focused in the areas of oncology and infectious diseases, and explores new areas lacking suitable solutions. To date, the company has launched three efforts: 1) OpsisDx™, a urine-based universal disease detection platform, 2) PCRopsis™, functionally superior Next Gen Direct PCR™ technologies for clinical applications, and 3) PlantOpsis™, direct PCR and other technologies to support the analysis of plants. For more information, please visit www.Entopsis.com, www.PCRopsis.com and www.PlantOpsis.com

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