

Contact: Tadao Kurozumi President & CEO
EIKEN CHEMICAL CO., LTD.
Code: 4549 Tokyo Stock Exchange

EIKEN Launches “Loopamp West Nile Virus Primer set”.

EIKEN CHEMICAL CO., LTD., head office in Bunkyo-ku, Tokyo, Japan, will launch its product “Loopamp West Nile Virus Primer set” on August 3, as the first product for primer set basic research.

It can detect the target gene in one step by using the combination of the primer set with 'Loopamp RNA amplification reagent kit (RT-LAMP)' which is already on the market, and amplification or the presence of WNV gene can be confirmed promptly (for 35 minutes) under isothermal condition (63 °C) by 'Real-time Turbidimeter' or fluorescence visual detection.

[“LAMP” method]

“LAMP”, a novel DNA amplification method, developed by Eiken Chemical Co., Ltd. in 1998 has the potential to replace PCR because of its simplicity, rapidity, specificity and cost-effectiveness. .

“LAMP” which stands for Loop-Mediated Isothermal Amplification is characterized by its use of four different primers specifically designed to recognize six distinct regions on the target gene and its process being performed at a constant temperature using a strand displacement reaction. Amplification and detection of gene can be completed in a single step, by incubating the mixture of gene sample, primers, DNA polymerase with strand displacement activity and substrates at a constant temperature (in the region of 60~65 °C). RNA amplification requires the same reagents as for DNA amplification, with the addition of reverse transcriptase. It provides high amplification efficiency, with DNA being amplified 10⁹-10¹⁰ times in 15-60 minutes. Because of its high specificity, the presence of the target gene sequence can easily be detected just by judging presence of amplified products.

『Loopamp 』 is a brand name of product using “LAMP” method.

For further information on “LAMP” method, please visit EIKEN GENOME SITE
(<http://loopamp.eiken.co.jp/e/index.htm>)