



A Novel Recombinant Protein based Diagnostic Kit for Hepatitis E

TECHNOLOGY AVAILABLE FOR TRANSFER

UNMET NEED AND OPPORTUNITY

Hepatitis E virus (HEV) is an epidemic infection which is ideally self-limiting, but in the severe cases it can be fatal. The infection can be avoided by keeping cleanliness which is not a current and acute solution, so researchers are trying to identify particular gene sequence to develop diagnostic kits and vaccines against Hepatitis E virus. HEV infections are responsible for over 50% of acute viral hepatitis cases in areas like India and mainland China. There are multiple diagnostic kits in the market but their sensitivity and specificity is low. The present technology is a sensitive test for detecting HEV infection compared to other commercial assay kits.

ADVANTAGES

1. Detects genotype 1&4
2. Higher sensitivity
3. Being swine virus and not human virus, it is safe for experimental and clinical handling

STAGE OF DEVELOPMENT

- Proof of concept is established in lab set-up
- In-house Lab Validation completed

INTELLECTUAL PROPERTY

Patent Application filed in India

TECHNOLOGY

The technology is based on the use of Open Reading Frame-2 from Swine HEV for diagnostic kit development against Hepatitis E virus. A modification of around 2% in the gene sequence has been made in the present technology which resulted in an enhanced protein production of HEV for better protein identification in the sera sample of the affected patient thereby leading to enhanced efficacy of the diagnostic kit. This is a platform technology which can be used to develop vaccine.

LICENSING OPPORTUNITY

BCIL is looking for a suitable industrial partner for commercialization of diagnostic kit for Hepatitis E virus detection.

REFERENCE

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4. <https://www.avivasysbio.com/hepatitis-e-virus-antibody-igm-elisa-kit-human-okca00014.html>

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