

## Laboratory Report

Name:

Lab Episode Number:

HN:

DOB :

Age:

Sex:

Order Date:

Time:

Station:

Order Owner:

### Clinical Genomics

#### APOE (for Cardiovascular Disease)

Specimen No.22002741-1: Collected 05/05/2022 09:13, Received 05/05/2022 09:13, EDTA Blood 3 ml. - Lavender Top Test

Test	Result	Flag	Units	Ref. Range
APOE genotype	e4/e4			

#### Interpretation

This genotype is associated with a predisposition to elevated total cholesterol, LDL-C and triglycerides, and an increased risk of cardiovascular disease compared to those with the APOE e3/e3 genotype.

#### Additional Information

APOE genotype (for Cardiovascular Disease) test is a TaqMan SNP genotyping assays performed on StepOne Plus-Real-Time PCR system (Life Technologies/ Thermo Fisher Scientific, Waltham, MA) for the qualitative detection of APOE rs429358 (NG\_007084.2:g.7903T>C), and APOE rs7412 (NG\_007084.2:g.8041C>T). The test was utilized to identify the three common APOE alleles (e2, e3, and e4). If no detectable APOE variant is found, a presumed e3/e3 genotype is assigned. Rare variants may be present that could lead to false-negative or false-positive results. Rare APOE variants and variants in other genes that cause hyperlipoproteinemia type III are not detected by this test assay.

-Test results should be interpreted in the context of clinical findings, family history, and other laboratory data. Please consider the environmental factors and personal variables.

-This method may affect the recipient's genotype in patients who received heterologous blood transfusions or allogeneic blood or bone marrow transplantation.

-The interpretation is associated with cardiovascular risk only and should not be used to determine the relative risk of other diseases.

-Misinterpretation of test result may occur if the information provided is incomplete or inaccurate.

-Genetic counseling is recommended to help understand the test result and explain the implications of this result for the patients and other family members.

-This test was developed and its performance characteristics determined by Bumrungrad International Hospital Laboratory in a manner consistent with CAP requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

#### References

1. Eichner JE et al. Apolipoprotein E polymorphism and cardiovascular disease: A HuGE review. Am J Epidemiol. 2002; 155: 487-495.
2. Schaefer EJ et al. Effect of gender and menopausal status on the association of apolipoprotein E phenotype with plasma lipoprotein levels. Results from the Framingham Offspring Study. Arterioscler Thromb Vasc Biol. 1994; 14: 1105-1113.
3. Song Y et al. Meta-analysis: Apolipoprotein E genotypes and risk for coronary heart disease. Ann Intern Med. 2004; 141: 137-147.

Authorised by Yaowaluck Hongkaew at 09:14 on 05/05/2022

**Comment:** Test results should always be used in conjunction with the patient's medical history, clinical examination and other findings.

**Remark:** c means correction.

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Preview: 05/05/2022 09:16

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