

Laboratory Report

Name:

Lab Episode Number:

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DOB :

Age:

Sex:

Order Date:

Time:

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Order Owner:

Clinical Genomics

APOE Genotype (Risk for Alzheimer Disease)

Specimen No.23098502-1: Collected 09/05/2023 15:55, Received 09/05/2023 15:56, EDTA Blood 3 ml. - (R&D)
 Lavender Top

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

Interpretation

The APOE e4 allele is associated with increased risk for late onset Alzheimer's disease. Individuals with this genotype have a 15-fold relative risk compared to those with the APOE e3/e3 genotype.

Additional Information

APOE Genotype (Risk for Alzheimer 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 are not detected by this test assay.

- 1.This is not a diagnostic test. 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.
- 2.APOE Alzheimer's Risk genotyping test is not recommended for children.
- 3.This method may affect the recipient's genotype in patients who received heterologous blood transfusions or allogeneic blood or bone marrow transplantation.
- 4.The interpretation is associated with Alzheimer's risk only and should not be used to determine the relative risk of other diseases.
- 5.Misinterpretation of test result may occur if the information provided is incomplete or inaccurate.
- 6.Genetic counseling is recommended to help understand the test result and explain the implications of this result for the patients and other family members. For inquiries or genetic consultation, please contact Preventive Genomics and Family Check-up Services, Bumrungrad International Hospital at 02-011-4890 or 02-011-4891.
- 7.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.Goldman JS, Hahn SE, Catania JW, et al. Genetic counseling and testing for Alzheimer disease: joint practice guidelines of the American College of Medical Genetics and the National Society of Genetic Counselors. Genet Med. 2011 Jun;13(6):597-605.
- 2.Van Cauwenbergh C, Van Broeckhoven C, Sleegers K. The genetic landscape of Alzheimer disease: clinical implications and perspectives. Genet Med. 2016 May;18(5):421-30.
- 3.Li Z, Shue F, Zhao N, et al. APOE2: protective mechanism and therapeutic implications for Alzheimer's disease. Mol Neurodegener. 2020 Nov 4;15(1):63.

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: 09/05/2023 15:58

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