

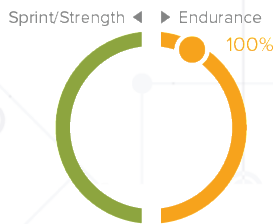
ATHLETIC PERFORMANCE TEST REPORT

Name:	Sample collection date:
Date of birth:	Sample arrival date:
Order ID:	Analysis completion date:
Sample ID:	Sample type:

PRINCIPLE OF THE TEST

This genetic test is used to identify ACE (angiotensin I- converting enzyme) and ACTN3 (alpha-actinin-3) gene variants that are associated with athletic performance. ACE gene influences cardiovascular performance and adaptation to physical strain, ACTN3 gene regulates muscle performance.

RESULT OF THE TEST



The result of the DNA test indicates that individual has high (100%) genetic potential in endurance sports.

Analysis results of genetic markers tested

Gene	Marker	Variant Name	Detected Genotype
ACE	rs4340	288BP INDEL/(ALU)/-	II
ACTN3	rs1815739	NM_001104.3:c.1729C>T (p.Arg577Ter)	XX

Methods used: Sanger sequencing

KAnton

Korneelia Anton MSc
Molecular Geneticist

Priit

Priit Tomson MSc
Head of Laboratory



Company's seal

ADDITIONAL INFORMATION

The following table gives a figurative overview when choosing potential sports. In the following table different sports have been divided according to the analyzed genes. The table should not be considered as a certain suggestion for getting involved preferably in these sports for which a person has suitable genetic prerequisites. For health sport enthusiasts the sensation of well-being and leading a healthy life are the most important aspects of training.

Gene variants ACE (I/D) and ACTN3 (R/X)	Primary choice	Secondary choice
II and XX	<ul style="list-style-type: none"> -running distances over 5000m; -swimming distances over 5000m; -very long ski marathons; -alpinism; -extreme endurance sports; -other sports depending on physical and psychological factors* 	<ul style="list-style-type: none"> -running distances 1500-5000m; -swimming 1500-5000m; -triathlon

Notes

* Other sports depending on physical and psychological factors: motorsport, yachting, shooting sport, archery, different types of modelism, logical thinking sports (board games, card games etc), quiz show, curling, golf, kubb game, petanque, pool, rolling games (bowling) etc

References

- Papadimitriou I D, Papadopoulos C, et al. (2008). "The ACTN3 gene in elite Greek track and field athletes." *Int J Sports Med* 29(4): 352-5.
- Amir O, Amir R, Yamin C, Attias E, Eynon N, Sagiv M, Sagiv M, Meckel Y (2009). "The ACE deletion allele is associated with Israeli elite endurance athletes." *Exp Physiol.* Sep;92(5):881-6.
- Ma F, Yang Y, Li X, Zhou F, Gao C, Li M, Gao L, (2013) "The Association of Sport Performance with ACE and ACTN3 Genetic Polymorphisms: A Systematic Review and Meta-Analysis" *PLoS One.* 8(1):e54685