

## PERSONAL ATHLETIC PERFORMANCE TEST REPORT

Name:

Date of birth: dd/mm/yyyy

Order ID:

Sample ID:

Sample collection date: dd/mm/yyyy

Sample arrival date: dd/mm/yyyy

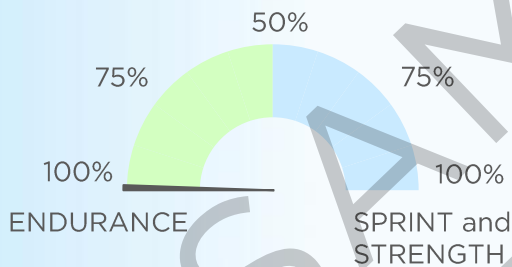
Analysis completion date: dd/mm/yyyy

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                |

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

### 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, 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