



## ADVANCED SPORT TEST

Detailed genetic and  
biochemical assessment of  
sports performance

**SYNLAB**   
SOLUTIONS IN DIAGNOSTICS

[www.synlab-sd.com](http://www.synlab-sd.com)



## Why undergoing this examination?

Sports practice is essential for a good quality of life, but not all individuals respond to sports in the same way. This is due, among other factors, to genetic variations that allow personalization of sports training. Sports performance is the result of the contribution and interaction of genetic and environmental factors. Genetic factors are related to individual differences in sports performance, such as muscular response, cardiovascular response, inflammation, and susceptibility to injuries. According to various studies, genetic factors contribute 20-50% to individual characteristics related to sports performance.

## What is the exam?

The **ADVANCED SPORT TEST** allows the genetic analysis of 34 SNVs in 31 genes, and 10 biochemical markers based on 5 parameters associated with individual characteristics in sports performance, offering personalized recommendations.

genetic profile + biochemical profile



Genetic profile



Biochemical profile

## For whom is it indicated?

- People who want to improve their sports performance through personalized training;
- People who want to start practicing sports;
- People who want to prevent, as much as possible, frequent injuries in physical activity.

## Technology

SNP Genotyping with Openarrays

## Advantages

### SYNLAB GROUP

Guaranteed by the experience of the absolute European leader in laboratory diagnostics.

### COMPLETE

- Report with objective results and detailed description;
- Glossary of terms;
- Personalized recommendations.

## Extra Information

**DOCUMENTATION** - Available on the SYNLAB Direct for clients

- Informed Consent;
- Clinical Questionnaire.

### PREPARATION

- Fasting for 8 hours before the test;



### Delivery Time

30 business days



### Sample Type

3mL of total blood in EDTA protected from light;  
3mL of total blood in EDTA;  
3mL of plasma in EDTA;  
9mL of serum in gel separator tube;  
5mL of serum in TRACE tube free of metals.

## Additional Information

ADVANCED SPORTS TEST List of parameters analyzed	
BLOCKS AND AREAS	BIOCHEMICAL MARKERS
<b>MUSCULAR RESPONSE AND PERFORMANCE</b>	
PERFORMANCE RESPONSE ENDURANCE TRAINING RESPONSE MUSCLE OXYGENATION CAPACITY	Zinc C-Reactive Protein
<b>RECOVERY AND INJURY</b>	
EXCESSIVE TRAINING AND MUSCLE INJURIES LIGAMENT INJURIES	Lactate Dehydrogenase (LDH) Creatine Kinase (CK)
<b>PERFORMANCE SUPPORT</b>	
CAFFEINE MAGNESIUM	Magnesium
<b>RECOVERY SUPPORT</b>	
ANTIOXIDANTS DETOX RESPONSE	Total Thiols, Thyroid-Stimulating Hormone (TSH)
<b>SPORTS NUTRITION</b>	
OMEGA-3 B-COMPLEX VITAMINS	Vitamin B6 Vitamin B9 Vitamin B12