

## **DNA Certificate**

## **Accordant International Pigeon Panel by ISAG**

Certificate issued on January 16, 2024 in Moen, Belgium Certificate updated January 16, 2024

The authenticity and updates of this certificate can be verified on "http://www.pigen.be" This certificate<sup>1</sup> ensures parentage authenticity of pigeon BE23-4164863.



Scan this QR code to verify this certificate on "http://www.pigen.be"

发送此QR码以在网址 www.pigen.be 上验证此证书

BE21-4153472

father

Gender by DNA: Cock Quality Genes<sup>3</sup>: DRD4: CCCT | LDHA: AB Certificate: SEP20210311

Proven by DNA

BE23-4164863

Gender by DNA: Cock Certificate: IAN20240126

Proven by DNA

BE21-4153292

mother

Gender by DNA: Hen Certificate: AUG20210187 Proven by DNA

BE14-2230911 Porsche 911

grandfather

Quality Genes3:

DRD4: CCCC | LDHA: AB Certificate: NOV20150010

Proven by DNA

BE16-4129304

grandmother

Quality Genes3:

DRD4: CCTT | LDHA: AB Certificate: JUN20180185

Proven by DNA

BE13-3126131

grandfather

Schumi junior

Certificate: SEP20150158

Proven by DNA

grandmother

Ruben Lanckriet

Pascal Lanneau



 $<sup>^2</sup>$  DNA testing is done according to internationally agreed Pigeon Panel and recommendations by ISAG (International Society of Animal Genetics). The testing labs are certified according NEN-EN-ISO 9001. The probability of exclusion (PE) of this parentage verification is higher than 99,9%.

<sup>3</sup> The following DNA markers are scientifically associated with racing performance; LDHA is a gene for a lactate dehydrogenase enzyme. DRD4 or dopamine receptor 4 gene is an indicator for character traits. CRY1 or cryptochrome 1 gene codes for a protein in the retina of the eye. Calcium/calmodulin-dependent serine protein kinase (CASK) is a gene important for synapse formation in the brain and the nerve-muscle connection.

LDL Receptor related Protein 8 (LRP8) is a gene important for the growth of the hippocampus inside the brain.

The hippocampus is important for recognition of geographic structures and navigational abilities. Glutathion-diSulfide-Reductase (GSR) is a protein that is associated with magnetoreception abilities.

