

# MOLECULAR PORTRAITS

A modern work of art made  
from your DNA

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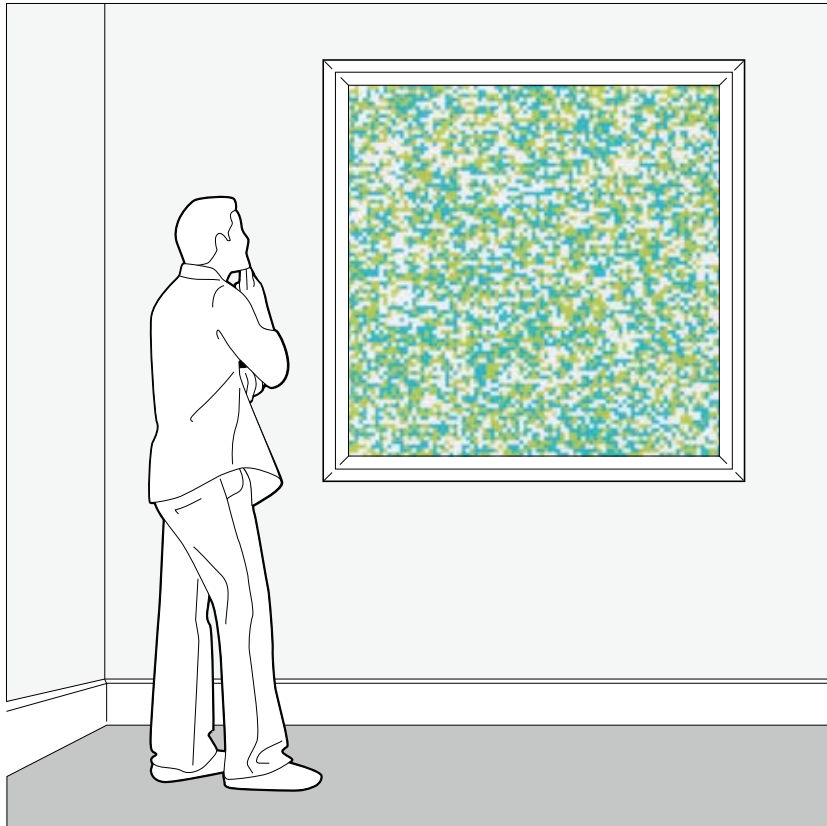
[www.molecular-portraits.com](http://www.molecular-portraits.com)



## Each person is unique

We differ in the shape of the nose, the eyes or our individual personality. Similarly, our genome displays variation – to an even larger extent than scientists were previously thinking.

Molecular Portraits™ creates your own personal genomic portrait in a very special way – as a modern work of art. Roughly spoken, we convert genetic differences into color pixels. To create your image, we examine variation at more than 10,000 individual locations in your genome. The resulting portrait will be as unique as your finger print – absolutely individual.



## A modern work of art made from your DNA

From your DNA, Molecular Portraits™ generates an image like a modern work of art – a unique piece taking up elements of Optical Art from the Sixties of last century in an entirely new context. Our molecular portrait is a large square which consists of 8464 small individual squares. Choose three colors from our chart and your DNA determines how the three colors are distributed amongst the small squares of the image. This way, we generate your highly individual mosaic.

Get a work of art and do good

With Molecular Portraits™ you are not only buying a beautiful piece of decoration for your home, you are also supporting non-profit organizations and foundations. With every purchase of a portrait, we give 50 euros to charity. Upon ordering of a molecular portrait, you decide where the money goes to.



## Single or group portrait

We are able to create a portrait for an individual person as well as for a group: Thanks to Molecular Portraits™, couples, families, friends or sports teams may unite in one picture and gain a whole new image of themselves. All we need is a saliva sample from each individual.

A group portrait will display fine color nuances in most places. The picture is more complex and multifaceted – and thus represents the differences within the group. The more people are united in a molecular portrait, the finer the gradations of color will be. As the mixture of colors is more difficult to predict in these portraits, we propose some color combinations to help with the decision.

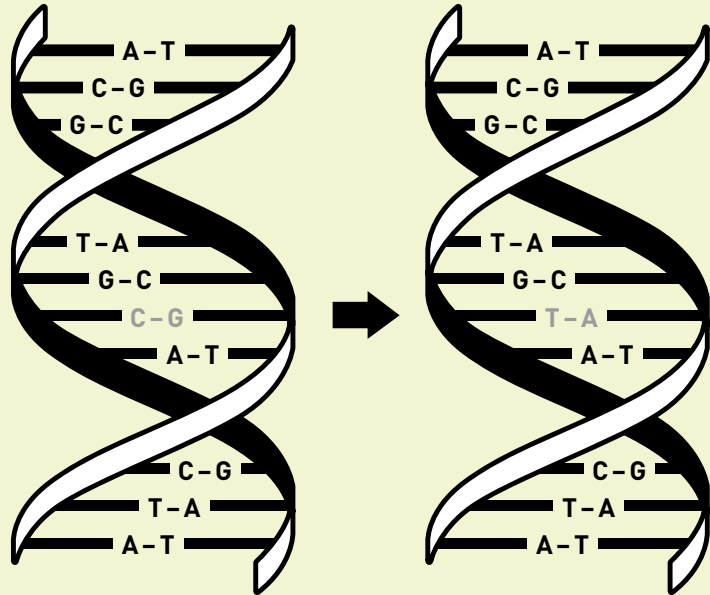
By the way: If two identical twins would create a group picture of themselves, it might look like a single portrait. Twins are very likely to have the same pattern of distribution of their genetic variants and, therefore, are unlikely to generate mixed colors in their portrait.

## Variation in the genome

For your work of art, we investigate variation in the genome, so-called SNPs: At certain spots of the DNA one module is exchanged for another. In general, those variants have no direct medical significance. Each of us carries them – some on one, some at another position. Since our genetic material consists of a double set of chromosomes, namely of 23 pairs of chromosomes, there are three possibilities:

1. A variant can occur twice, i.e. on both partner chromosomes.
2. A variant is carried by one chromosome, but not by the partner chromosome.
3. A gene locus shows no variant - neither on the first nor the second chromosome.

For each of these three possibilities related to your genome you choose one color.





## Choose colors: 3 out of 81

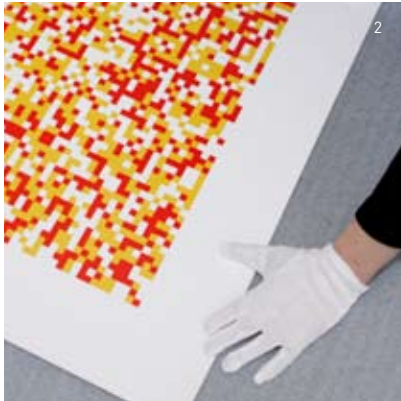
Your molecular portrait is not only unique because of your DNA, but also the colors you choose from our chart make it a distinctive work of art. Overall, we offer a choice of 81 colors you can select from to create your individual molecular portrait.

The colors indicate how you differ in certain places of your genetic make-up from other people. One color you choose stands for the occurrence of a double variant in your genome, the second for a simple variant, and the third color for the case that no variant is present.

If you would like to order a group portrait, we propose some color combinations to help with the decision. By creating a molecular portrait of a group of individuals, new shades of colors will emerge and they will be more difficult to predict.

Please note: These colors (left) do not exactly correspond with the final printing colors. Together with the contract we will therefore send you a chart showing all our printing colors true to the original.

The portrait after printing (1),  
being mounted on a bonding plate (2)  
and with all-around aluminum frame  
ready for hanging up (3)



## Printing options

We create your molecular portrait as a quality ink print on bright white „Fine Art Pearl“ paper produced by the Hahnemühle paper mill. This paper has the look and feel of a traditional Baryta photographic paper. You can choose from three print versions.

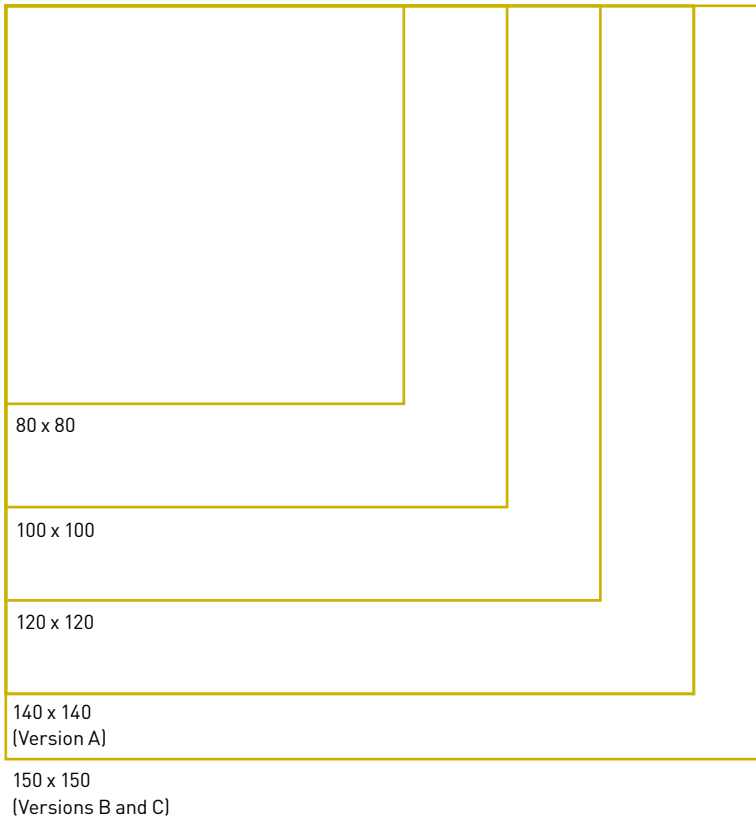
Version A: With framing margin/white border

Your portrait comes with a white margin of ten centimeters. The edges are cut. Framing is not included.

Version B: Mounted on bonding plate

Borderless mounting of your image onto an aluminum bonding plate (Dibond) of the same size. An all-around aluminum frame is fixed to the back, so you can hang your picture immediately. To enjoy the entire brilliance of the colors, you can leave the front of your mounted portrait unprotected. Alternatively, a semi-matt UV-protective film can be applied to protect the work from any damage.

Version C: Mounted on bonding plate, covered with an acrylic glass plate  
Similar to Version B but with additional covering of the front with an acrylic glass plate (ArtSec). Two kinds of acrylic glass plates are available: matt and brilliant.



## Choose format

We offer your molecular portrait in five sizes (in centimeters): 80 x 80, 100 x 100, 120 x 120, 140 x 140 (version A) or 150 x 150 (versions B and C). If you decide for version A – Fine Art print with a white margin of ten centimeters – the actual image will be smaller. At a paper size of 100 x 100 cm the image size is 80 x 80 cm. Versions B and C are borderless, with the image size corresponding to the paper size. All sizes at a glance:

Version A: Fine Art print with a white margin of ten centimeters

Image size (centimeters)	Paper size (centimeters)
60 x 60	80 x 80
80 x 80	100 x 100
100 x 100	120 x 120
120 x 120	140 x 140

Versions B and C: borderless, mounted, image size corresponds to paper size (centimeters)

80 x 80  
100 x 100  
120 x 120  
150 x 150



## Ordering a portrait

Have you decided to purchase a molecular portrait? Then we look forward to receiving your order. Once we have received the deposit of 100 euros, we will immediately send you the DNA sample set. The shipment will also contain a chart for your final color selection, the order form and the form for your declaration of consent for the DNA analysis. To be able to create your portrait, we ask you to remit the full invoice amount in advance. Upon receipt of payment, we will proceed with your molecular portrait – an individual work of art specifically created for you.

### Privacy

If you want to order a molecular portrait with us, we appreciate your trust and guarantee that we will process all information with the utmost discretion and security. Be certain: Your privacy is our top priority and we will do everything so that you can feel safe. It goes without saying that your personal data will remain only with us and are protected by the best possible security systems. More about privacy issues you can find here: [www.molecular-portraits.com](http://www.molecular-portraits.com).

## Ordering – Step by step



1) You have the choice: What colors should your molecular portrait appear in? You may pick three colors out of 81 colors.



2) Do you want a smaller picture sized 80 by 80 centimeters? Or should it be the very big one? Choose one of our five formats for your individual image.



3) We print your portrait in quality ink on bright white paper – either pure for framing or mounted onto an aluminum bonding plate. Decide on the front lining: pure, UV-protective film or acrylic glass.



4) Once you have decided to order a molecular portrait, we look forward to receiving a mail or a call from you. Please make your 100 euros deposit.



5) Within three business days, you will receive the DNA sample set. Do not worry, the sampling procedure is quite simple (see next double page).



6) Fill out the contract and the confirmation that the DNA sample is yours. Choose the three colors for your portrait from our chart.



7) In the package you will also find an invoice. To allow us to process the order, please remit the invoice amount. Only then can we start producing your image.



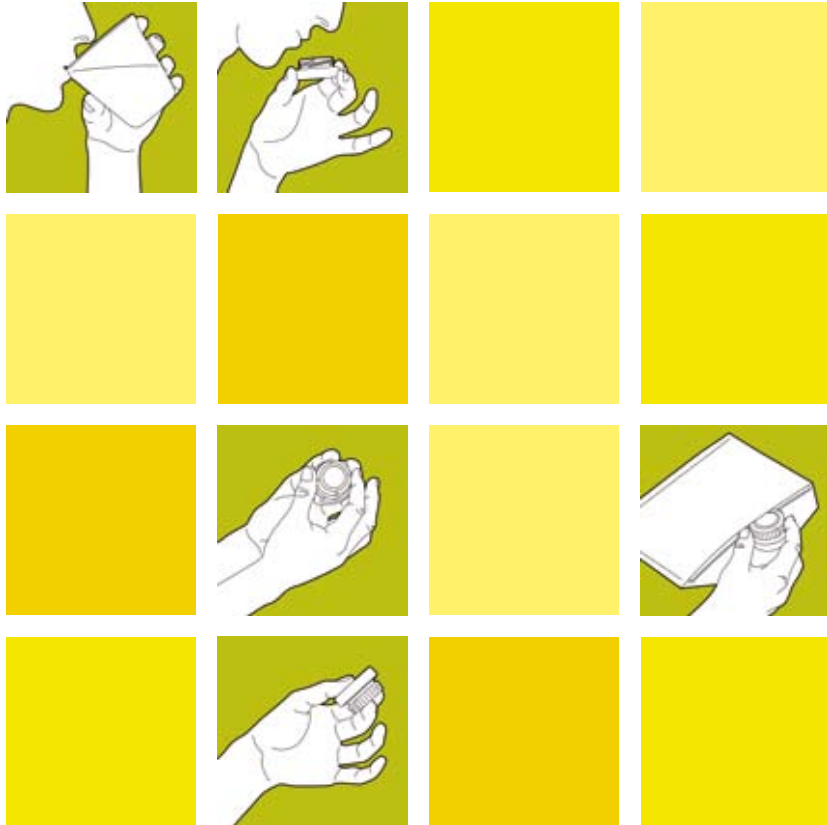
8) Now insert the sample set, the order forms and the confirmation form in the provided envelope. Seal it up. We will schedule the collection for you.



9) Once your payment has been received, a specialized laboratory analyzes your DNA sample. We then create a molecular portrait from your data.



10) After around ten weeks, we will send you the portrait. Look forward to the unique molecular portrait of you, your partner, your entire family or other people specifically related to you.



## Drawing your DNA sample – Step by step

1. Rinse your mouth with water and wait at least 30 seconds. Read the instructions accompanying the sample cup.
2. Spit until the amount of liquid saliva (not bubbles) reaches at least the lower level indicated on the cup. To stimulate saliva production, some people find it easier to spit more if they place  $\frac{1}{4}$  teaspoon of plain white sugar on their tongue. Finish spitting within 30 minutes.
3. Put the cup on a flat surface. Screw the lid onto the cup. Make sure that the lid is closed tightly.
4. Mix gently for at least 10 seconds by turning the cup upside down several times. This way your saliva is mixed with the reaction liquid contained in the lid.
5. Now put the cup in the enclosed plastic bag. Close the bag and put it into the already addressed envelope. Also add the order forms and the declaration of consent including your confirmation that the saliva sample is yours. Check whether you have signed both documents.

## About us

Molecular Portraits Genomic Art UG (haftungsbeschränkt – with limited liability) was founded in 2009. The founding team consists of two physicians, two designers, a computer scientist and a management expert.

The idea to create molecular portraits from complex genetic variation was developed by Martin Stanulla – originally for a charity project, to give the public a better understanding of modern scientific methods applied in contemporary research. Martin Stanulla is a professor of molecular pediatrics at the University Hospital Schleswig-Holstein at Kiel, Germany. His scientific focus lies on childhood leukemias. He identifies factors that are implicated in their etiology and the course of disease. More information on the remaining founders can be found here: [www.molecular-portraits.com](http://www.molecular-portraits.com).

Do you have any questions regarding Molecular Portraits™?

We would be glad to help you. Please call us at +49 40 333 108 18. We are looking forward to your call.

## Imprint

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Photos  
Individual portrait: Anna-Lena Thamm (Photocase)  
Group portrait: Monika Adamczyk (fotolia)  
Ordering a portrait: Maksym Bondarchuk (iStockphoto)