

CCTGAATAACGTTAGGTTACACATGGACTGGCACAWHOLE GENOMEAGATGTAAGTACGAATTTTAAGGGATAGTT
 GTCAGCTTAAATGGEPIGENETICS GATTCCATCAACCATGATTGATCCGGCGGTTACCATGCTDNA CGAATAAAA
 TATSNPCACGATGGTCCATGGTTGCCGAAATTCGGATGARRAYGTACTTGGCCCATGAGCTGAGTTCCCAAACGGC
 CGATGACTATGATTGCACCATGATAAGWASTCGCATCGACCAATCATAATGGMICROBIOMEATTGCTGAGATACT
 GATAAGEXOME SEQUENCINGTACCTCTGCCCTTAAACACACRNAAGGTAGTTATCCGTAGGGACCCTAGTTGGTT

■ ■ HuGe-F ■ ■

Human Genomics Facility



Protocol DNA shipment for the Global Screening Array

It is important to follow this protocol when sending DNA samples to the Human Genotyping Facility (HuGe-F) of the Genetic laboratory of the department of Internal Medicine at Erasmus MC. Some of the steps might seem obvious, but we want to be sure the DNA samples arrive in good quality and format. **Please note that any deviation from this protocol could lead to us sending back the samples.**

When we receive the samples we will start the genotyping procedure as soon possible.

Step 1

- The DNA samples should be measured with nanodrop. For the GSA we need 200 ng in 4 µL (up to 10 µL is possible if the concentration is lower). Sending in lower concentrations is at your own risk. Do not send more or less DNA than 200 ng.
- The whole genotyping procedure is automated on robotic systems. As such, it is **VERY** important to use Abgene 96 deep wells plates (see below). Please do **NOT** use other types of plates.

Abgene Storage Plate, 96-well, 0.8 mL, transparent, individually wrapped

ThermoFischer

Ref: AB0765

<https://www.thermoFischer.com/order/catalog/product/AB0765#/AB0765>

- Do **NOT** include blanks in the plates. If you do include blanks, these will be run as samples and charged for accordingly.

Step 2

- Clearly label the plates. Please use stickers for this and add the following information:

GSA reference number

Plate number

Research Centre / study name

CCTGAATAACGTTAGGTTACACATGGACTGGCACAWHOLE GENOMEAGATGTAAGTACGAATTTAAGGGATAGTT
 GTCAGCTTAAATGGPIGENETICS GATTCCATCAACCATGATTTCGATCCGGCGGTTACCATGCTDNA CGAATAAAA
 TATSNP CACGATGGTCCATGGTTGTCCGAAATTCGGATG ARRAYGTACTTGGCCCATGAGCTGAGTTCCCAAACGGC
 CGATGACTATGATTGCACCATGATAA GWASTCGCATCGACCAATCATAATGGMICROBIOMEATTGCTGAGATACT
 GATAAGEXOME SEQUENCINGTACCTCTGCCCTTAAACACACRNAAGGTAGTTATCCGTAGGGACCCTAGTTGGTT

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Step 3

- Apply an aluminum seal to the plates. Please be sure to use a seal that sticks well (the seals below sticks sufficiently). Do **NOT** use heated seals, because these are difficult to remove.

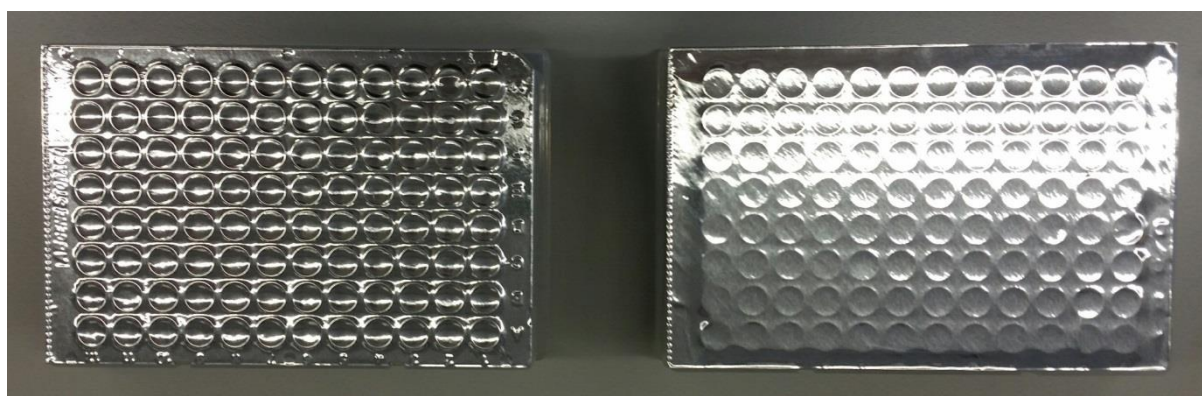
Microseal® 'F' PCR Plate Seal, foil, pierceable

Bio-rad

Ref: MSF1001

<http://www.bio-rad.com/en-uk/sku/msf1001-microseal-f-pcr-plate-seal-foil-pierceable>

- It is very important to seal the plate well. Use a roller for this. Pay special attention to the sides of the plate. In the picture below you see an example of what it should look like.

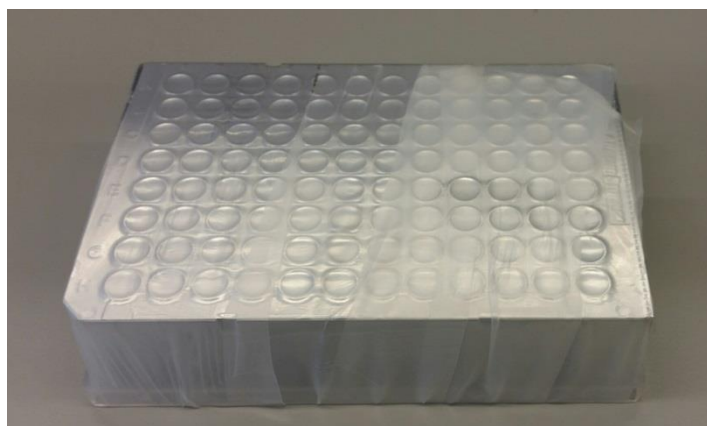


CORRECT

WRONG

Step 4

- To prevent the seal from loosening during shipment on dry ice, wrap the plates in parafilm (see picture below).



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CCTGAATAACGTTAGGTTACACATGGACTGGCACAWHOLE GENOMEAGATGTAAGTACGAATTTAAGGGATAGTT
GTCAGCTTAAATGGEPIGENETICS GATTCCATCAACCATGATTGATCCGGCGGTTACCATGCTDNA CGAATAAAA
TATSNPCACGATGGTCCATGGTTGTCCGAAATTCGGATGARRAYGTACTTGGCCCATGAGCTGAGTTCCCAAACGGC
CGATGACTATGATTGCACCATGATAAGWASTCGCATCGACCAATCATAATGGMICROBIOMEATTGCTGAGATACT
GATAAGEXOME SEQUENCINGTACCTCTGCCCTTAAACACACRNAAGGTAGTTATCCGTAGGGACCCTAGTTGGTT
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Step 5

- Place the plates in plastic bags and put them in sufficient dry ice.

Step 6

- Complete the following files before sending the samples.

File 1. 96 wells layout of samples in Excel format.

File 2. Agarose gels of the DNA integrity on a subset (5 %) of the study.

File 3. 'Samplesheet.xlsx' file for our LIMS system This file will be provided along with an 'GSA Samplesheet file instruction' file).

Step 7

- Before sending samples, first send the files above to Mila Jhamai (p.jhamai@erasmusmc.nl). Only send samples to HuGe-F, when she has approved all files.

Erasmus MC
Att: Mila Jhamai/Pascal Arp/Michael Verbiest
Room Ee 575
Human Genotyping Facility (HuGe-F)
Genetic Laboratory
Department of Internal Medicine
Erasmus MC Rotterdam
Westzeedijk 353
3015 AA Rotterdam
The Netherlands
010-7043645 / 010-7043575

For general questions regarding the GSA project, please contact the GSA projectmanager dr. Gaby van Dijk (g.m.vandijk@erasmusmc.nl)