

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.thermofisher.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  
 TATSNPCACGATGGTCCATGGTTGCCGAAATTCGGATGARRAYGTACTTGGCCCATGAGCTGAGTTCCCAAACGGC  
 CGATGACTATGATTGCACCATGATAAGWASTCGCATCGACCAATCATAATGGMICROBIOMEATTGCTGAGATACT  
 GATAAGEXOME SEQUENCINGTACCTCTGCCCTTAAACACACRNAAGGTAGTTATCCGTAGGGACCCTAGTTGGTT

■ HuGe-F ■

Human Genomics Facility



### 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.

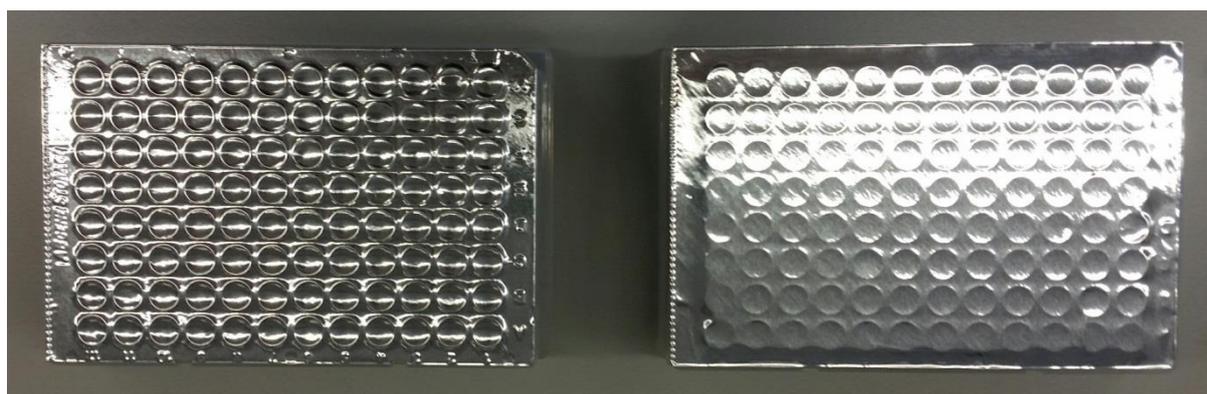
Microseal® 'F' PCR Plate Seal, foil, pierceable

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.

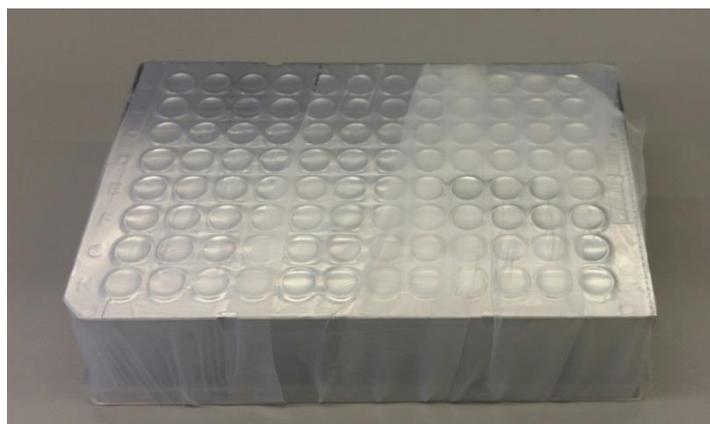


**CORRECT**

**WRONG**

### Step 4

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



CTGAATAACGTTAGGTTACACATGGACTGGCACAWHOLE GENOMEAGATGTAAGTACGAATTTAAGGGATAGTT  
GTCAGCTTAAATGG EPIGENETICS GATTCCATCAACCATGATTGATCCGGCGGTTACCATGCTDNA CGAATAAAA  
TATSNP CACGATGGTCCATGGTTGTCCGAAATTCGGATG ARRAYGTACTTGGCCCATGAGCTGAGTTCCCAAACGGC  
CGATGACTATGATTGCACCATGATAA GWASTCGCATCGACCAATCATAATGGMICROBIOMEATTGCTGAGATACT  
GATAAGEXOME SEQUENCINGTACCTCTGCCCTTAAACACACRNAAGGTAGTTATCCGTAGGGACCCTAGTTGGTT

■ ■ HuGe-F ■ ■

Human Genomics Facility



## 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)