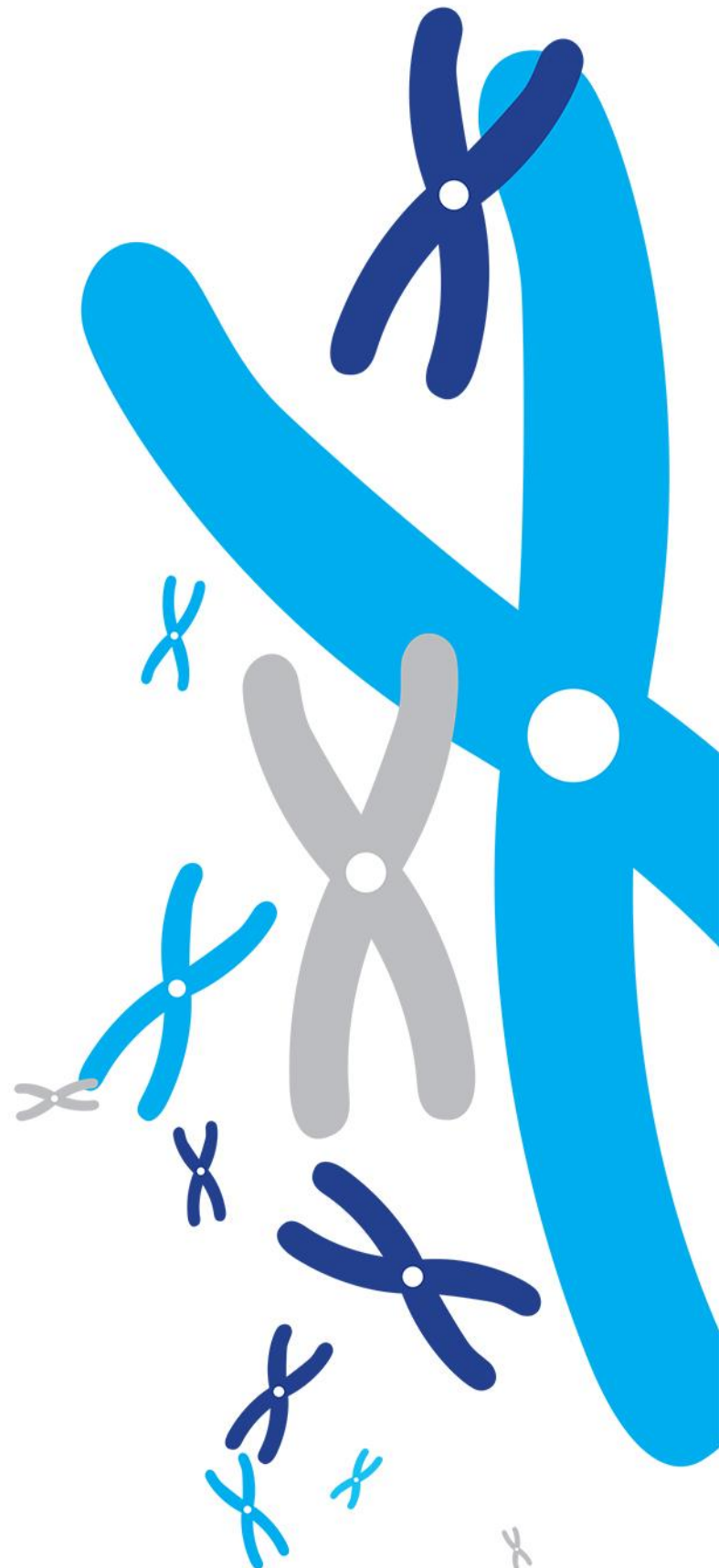


# Instructions

## Arrays Service

**ACGH and AGH**

Cat K20, K21, and K22



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# A guide to preparing and shipping DNA samples for array services

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## Types of service

Cell Guidance Systems offers two services for human samples based on different array platforms: **aCGH (array comparative genomic hybridization)** and **AGH (array genomic hybridization)**.

- **aCGH is performed on the Agilent 8x60K platform:** This system utilizes two differentially labeled DNA samples co-hybridized to an array with ~55,000 oligonucleotide probes. The relative abundance of DNA binding to each probe provides a direct measure of relative copy number of the two samples.

There are two service options for aCGH:

1. A single sample is hybridized against control DNA sample provided by ourselves.
2. Both test and control samples are provided by the customer and are co-hybridized to assess acquired copy number variations (CNVs). We recommend that both the control and test DNA samples are isolated from the cells at the same time.

- **AGH is performed using Affymetrix CytoScan 750K platform:** The hybridization data from a single test DNA is compared with a series of control hybridizations in silico. The array has 750,486 distinct features. The AGH assay is particularly useful for assessing acquired loss of heterozygosity (LOH).

## Sample requirements

The aCGH/AGH services are only available for human samples. Please see our necessary sample requirements below:

- **Sample type:** isolated DNA
- **Concentration:** >50 ng/μl
- **Minimum total volume:** 1 μg
- **Purity:** A260/A230 = 1.8-2.2    A260/A280 >1.8

For further information, please visit our website [www.cellgs.com](http://www.cellgs.com).

# Requisition form

## A. Cell line information

	Sample name	Passage number	Cell type (e.g. ESC, iPSC, fibroblasts)	Known abnormalities?	Type of service: array CGH or AGH?	For samples for array CGH, are you providing the control sample? If yes, what is the control sample?	Notes	Internal number (CellGS USE)
1.								
2.								
3.								
4.								
5.								

## B. Contact and payment information

For credit card payment, please order via the web site [www.cellgs.com](http://www.cellgs.com) and copy internet order number below.

Internet order number / Official PO# \_\_\_\_\_

Contact person \_\_\_\_\_

E-mail to send the report \_\_\_\_\_

Institution \_\_\_\_\_

Phone number \_\_\_\_\_

### Cell Guidance Systems OFFICE USE

Date received

Data delivered on

## Shipping instructions

### A. DNA samples

The DNA samples being provided for the service are only for research and development (R&D) purposes, and can be sent with standard couriers with a selected priority overnight shipment. Ideally, the samples will be received within 1 – 2 days.

DNA samples are shipped under “**Biological Substances Category B**”, so the package should be packed using the triple packaging system consisting of leak-proof primary inner packaging, leak-proof secondary packaging, and an outside box with dangerous labels (as detailed below).

### B. Prepare the documents

1. Complete an International Air Waybill. Contact your local courier office to assist you in completing this form.

Section heading	Information to provide
Shipment information	UN3373, biological substance category B. DNA samples, non-toxic, non-hazardous, not for human/animal use, for research use only. <i>Specify number of vials and volume per vial.</i>
Harmonized tariff code	3822005090
Express packaging service	Select: international priority service
Special handling	Shipper's declaration not required

2. Prepare a Commercial Invoice and make 4 copies (not required for customers within the European Union (EU)).
3. Complete the requisition form listing all details for the samples you are shipping (page 4). If you are sending more than 5 samples, please use copies of the requisition form to make for the total number of samples.
4. E-mail the tracking number and shipment delivery date to Cell Guidance Systems at [info@cellgs.com](mailto:info@cellgs.com).

### C. Ship the package

Packaging for DNA samples must be constructed with 3 layers:

1. **Inner (primary) packaging.** Provide the DNA sample in a correctly labeled microcentrifuge tube. The description in the tube label should match the description in the requisition form. Tighten the cap and seal with parafilm. Do not fill the tube to the top.

2. **Intermediate (secondary) packaging.** Wrap the microcentrifuge tube in absorbent paper toweling and place the tube in a larger 50 ml centrifuge tube. Tighten the cap and seal with parafilm.
3. **Outer packaging.** Place the 50 ml tubes in a sturdy, well-padded, polystyrene box containing ice packs. The ice packs included should be enough to keep the samples refrigerated for at least 3 days. Do not send samples in envelopes or similar unsuitable packaging. The box should be clearly labeled with “Biological Substance Category B” and UN3373 labels. The outer package should not exceed 4 kg.
4. Place the following documents in the shipping box and seal it with packing tape.
  - 1 copy of the Commercial Invoice (EU customers do not require this)
  - Requisition form
5. Place 3 copies of the Commercial Invoice on the outside of the box, in the plastic sleeve.
6. Contact your selected courier to pick up the box, or arrange to deliver the package to a drop off point. The method selected should be overnight shipment for next day delivery.
7. Email the tracking number and shipment delivery date to Cell Guidance Systems.

#### D. Delivery address

##### For USA

**Attention:** Umesh Patel  
**Cell Guidance Systems LLC**  
Helix Center  
1100 Corporate Square Drive  
St. Louis  
MO 63132  
USA  
Tel 760 450 4304

##### For Europe and Rest of the World

**Attention:** Michael Jones  
**Cell Guidance Systems**  
Maia Building  
Babraham Bioscience Campus  
Cambridge  
CB22 3AT  
United Kingdom  
Tel +44 (0) 1223 497 115

### E. Packaging marks

1. Print an “Biological Substance Category B” and UN3373 label and attach it to the outside of the package.
2. Write the name of the sender in the area designated.



Minimum dimensions of this label are: 100 x 100 mm.  
CUT OUT AND ATTACH TO EXTERIOR OF PARCEL.

DISCLAIMER: These materials are provided as a courtesy, to be used as guidelines to assist properly trained shippers. Cell Guidance Systems is not responsible for correct shipping.

Cell Guidance Systems' reagents and services enable control, manipulation and monitoring of the cell, both *in vitro* and *in vivo*.



**Growth Factors**

- Recombinant
- Sustained Release

**Exosomes**

- Purification
- Detection
- Tracking
- NTA Service

**Small Molecules**

**Cell Counting Reagent**

**Matrix Proteins**

**Cell Culture Media**

- Pluripotent Stem Cells
- Photostable
- *In Vitro* Blastocyst Culture
- ETS-embryo Culture
- Custom Manufacturing Service

**Gene Knock-Up System**

**Cytogenetics Analysis**



General [info@cellgs.com](mailto:info@cellgs.com)  
Technical Enquiries [tech@cellgs.com](mailto:tech@cellgs.com)  
Quotes [quotes@cellgs.com](mailto:quotes@cellgs.com)  
Orders [order@cellgs.com](mailto:order@cellgs.com)

[www.cellgs.com](http://www.cellgs.com)

**EUROPE**

**Cell Guidance Systems Ltd**  
Maia Building  
Babraham Bioscience Campus  
Cambridge  
CB22 3AT  
United Kingdom  
T +44 (0) 1223 967316  
F +44 (0) 1223 750186

**USA**

**Cell Guidance Systems LLC**  
Helix Center  
1100 Corporate Square Drive  
St. Louis  
MO 63132  
USA  
T 760 450 4304  
F 314 485 5424