Notes to Researchers

Shipment and Storage Requirements for Stem Cells Received from the UK Stem Cell Bank

These notes are intended to provide step-by-step information on receiving human stem cells from the UK Stem Cell Bank.

These notes do not contain information on culture conditions, cryopreservation or thawing of human stem cells or any information on feeder cells.

It is assumed that the requestor has received approval from the UK Steering Committee and has the necessary facilities to store the frozen/vitrified material received from the Bank. The Bank does not send out growing cultures of stem cells.

Step 1

Complete the pre-shipment documentation. Before we can ship cells to you we will need to have received from you signed copies of the legal agreements required to access cells. The type of agreement will depend on the type of stem cells you have requested and their intended use. Information on Materials Access Agreements (MAA), Materials Use Licences (MUL) and Research Use Licenses (RUL) for Research and Clinical Grade cell lines may be found in the information sheet Notes to Researchers: How to Access Stem Cell Lines from the UK Stem Cell Bank (s/n 5220).

Step 2

Provide contact details to the UK Stem Cell Bank. You will need to complete and return a Shipping and Order Form along with the other documentation. The contact person should be the person responsible for receiving the cells and ensuring that the material is transferred to appropriate storage within the laboratory or institution. This may not necessarily be the Principle Investigator. The address you give us will be the one to which the cells will be delivered by our couriers. The form will show the Bank’s reference number for this request. Please quote this on all correspondence regarding your order.

Step 3

Provide invoice and payment details to the UK Stem Cell Bank. You will also need to provide us with:

1. An order number (and project code if applicable)
2. The address of your finance department (and VAT number where applicable)

This can be done through the Shipping and Order Form (s/n 5271). The UK Stem Cell Bank currently levies a processing charge for the stem cell lines in addition to the full cost of transportation.

Step 4

Arrange for shipment of the stem cell line(s). This will be arranged for you by the UK Stem Cell Bank using the Bank’s approved couriers. However, you will need to supply us with a preferred date for shipment and tell us if there are any national holidays that may occur over the shipment period. Shipment may take up to seven days depending on the location and failure to inform us of any national holidays may lead to a significant delay, or loss, of material.

It is the responsibility of the person requesting the cell line to arrange any necessary customs permits. We, or our couriers, may be able to help you with this, but failure to arrange these may lead to unnecessary delays, or loss, of the material for which the UK Stem Cell Bank will not be held responsible.
Step 5

Arrange appropriate storage facilities at your shipment address. Depending on the cell line requested, the stem cells will be transported either under dry ice (solid CO$_2$) at $-79^\circ$C, or in a liquid nitrogen (vapour-phase) dry-shipper at $-196^\circ$C. Stem cell lines transported on dry ice may be stored at $-80^\circ$C for short periods of time (up to 1 month). The UK Stem Cell Bank recommends that for long-term storage, cells should be stored at or near the temperature of liquid nitrogen. Stem cell lines transported in a liquid nitrogen dry-shipper must be stored at or below $-150^\circ$C at all times.

Step 6

Receive the stem cells. Dispatch of stem cells is handled for the Bank by the Medicines And Healthcare products Regulatory Agency (MHRA). Their dispatch department will inform you when the stem cell shipment has been collected by the couriers and provide you with the consignment number and telephone/website contact for following your shipment if this facility is provide by the couriers themselves. When the cells arrive you will need to:

1. Sign the couriers receipt form.
2. Inspect the Package
   * Dispatch on Dry Ice. If the cells have been dispatched to you in dry ice (solid CO$_2$), open the shipment and check any temperature monitoring device provided within the container to ensure the correct storage temperature has been maintained. If no temperature monitoring device has been provided inspect the shipment to ensure that sufficient dry ice remains to have maintained the cells in the frozen state. If you are in any doubt, inform the Bank immediately using the contact numbers supplied to you.
   * Dispatch in a Dry-shipper. A dry-shipper is a container which holds liquid nitrogen in a safe manner for transportation. The container is not pressurised, but must be maintained in an upright condition. Do not store the container on its side. Failure to observe this may lead to a loss of the material. The cells will either be shipped in a validated dry-shipper provided by the Bank or, more usually, in a dry-shipper provided by CryoPDP (https://cryopdp.com/). The dry-shipper will be fitted with a temperature data logger (located in the lid or in the bottom of the dry-shipper. Do not tamper with this. Where the device is located in the lid, ensure that the lid is returned to the courier along with the dry-shipper. Failure to return a UKSCB dry-shipper and its lid will result in you being charged the full cost for replacement.
3. Check that the contents of the consignment are intact and transfer the cryovials/straws immediately to an appropriate low temperature storage container.
4. Log the unique stem cell identification number (sent with the cells) in your records. This number ensures traceability and is particularly important in the case of stem cell material produced under the HTA human application standards. You will also be supplied with Stem Cell Manuals an IFU and a Certificate of Analysis for the cell line. Please retain all information supplied with the cells. If any of the above information is missing, please contact the Bank.
5. Return the empty dry-shipper.
   * UKSCB Dry-shippers. Failure to return a UKSCB dry-shipper and its lid will result in you being charged the full cost for replacement. If the cells have been dispatched in a UKSCB-owned dry-shipper, we will arrange collection and notify you of the date/time of collection.
   * Third Party Dry-shippers. Dry-shippers belonging to CryoPDP should be returned by following the instructions supplied by CryoPDP with the container. Follow all supplied instructions. Pick up of the container following delivery to you is usually with 24 – 48 hours. Failure to return the CryoPDP dry-shipper will incur charges levied by CryoPDP.
Contact Details
UKSCB general enquires: enquiriesmail@mhra.gov.uk

Check List (Please complete and retain with your records as we may request this in any dispute)

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Keep these notes with your records.