

LIFE SCIENCES & HEALTHCARE

SECURE AND STREAMLINED TRANSPORTATION OF BIOLOGICAL MATERIALS FROM THE UK TO THE US

THE CHALLENGES



To deliver sensitive biological cells from the UK to the US



Meet environmental conditions for duration of travel



Deliver the cargo within a 24-hour timeframe

THE SITUATION

A UK-based biomedical company required a safe and secure transatlantic transportation solution for a special shipment of delicate iPSC-derived epithelial cells - from the UK to the USA.

Working in collaboration with Rhenus and Cellbox, a solution was identified that satisfied all elements of the customer's brief.

To help preserve the structure, the cells required containment inside an active CO2 incubator, to ensure strict temperature controlled conditions could be met. This included maintaining the cells at 37 degrees Celsius for 24 hours, with a consistent level (5%) of CO2 inside the product case of the incubator.

Cellbox deployed a portable CO2 incubator, approved for international flights, that provides laboratory conditions for the transportation of living cells. Due to their sensitivity, the cells could not be exposed to the X-Ray screening process during customs checks at the departing border, as this would almost certainly have damaged the shipment.

The process – including collection of the cells from Cambridge, UK, export clearance at UK customs, transportation, checking the set parameters of the Cellbox, import clearance at US customs and delivery to Fort Worth, Texas – needed to be completed within 24 hours to avoid any deterioration of the materials.

HOW RHENUS HELPED

Rhenus's carried out an extensive assessment of the potential risks. Given the highly sensitive nature of the shipment, a safe and secure transportation solution not only required meticulous planning but also a deep understanding of customs procedures at both UK and US borders.

Rhenus delivered a bespoke solution which included the presence of a qualified on-board courier to protect the Cellbox. Specialising in human cell transportation, this courier was also familiar with customs procedures at origin and destination, facilitating a smooth transition.

READ MORE ABOUT THE WORLDWIDE SERVICES OFFERED BY RHENUS: www.rhenus.group



WHY TAKE THE RHENUS ROUTE?

Rhenus takes responsibility for sensitive, complex deliveries under significant time constraints and can offer tailor-made logistics solutions based on the unique requirements of each shipment.

In this instance, the solution required Rhenus's Life Sciences & Healthcare division – which operates teams in many countries – to provide constant communication flow for the duration of travel, from collection in the UK right the way through to delivery in Texas. Live status updates on the battery were also provided during the flight, along with the CO2 and temperature status of the Cellbox.

Bringing together experts with a passion to provide a first class service and solution to clients, Rhenus and its approved suppliers were able to help the customer achieve its goal of door to door delivery to the USA just under 16 hours after collection - comfortably within the 24-hour time limit.