CASE STUDY

PLANER

Planer Benchtop Incubator BT37 Gives Cancer Research a Boost

CANCER RESEARCH UK

Cancer Research UK is the world largest independent cancer research charity. Based in the UK, it conducts research into the prevention, diagnosis and treatment of the disease.

It also provides information about cancer and runs campaigns aimed at raising awareness of the disease and influencing public policy.

Ian Rosewell, of the London Research Institute, had been using conventional large CO_2 incubators for over 15 years, to grow and maintain cultures of different mice embryos, which are vital in the work carried out by Cancer Research.

An Incubator Study

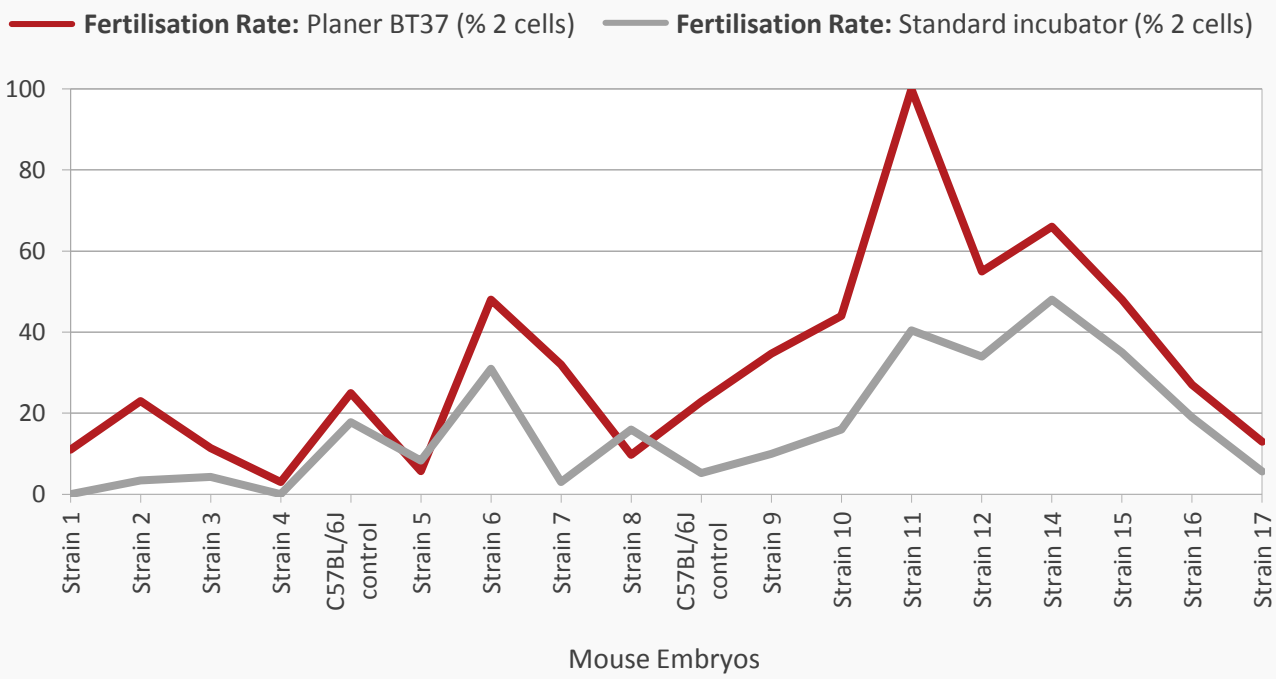
In 2011, Rosewell began a study which aimed to compare the fertilisation rates of mouse embryos cultured using different incubators. The difference between his current CO_2 incubators and the Planer Benchtop BT37 incubator was startling.

Results showed an increase in fertilization rates in 16 out of the 18 embryo strains tested. Many of the embryos tested in the Planer BT37 had an increased fertilization rate of well over 3 times that of the standard incubator.

"Another week of IVF and results look fantastic, really a sea change over what we have grown used to and in parallel testing, always significant with fertilisation rates as high as 100%."

Ian Rosewell, Cancer Research UK

Fertilisation Rates of Mouse Embryos



CASE STUDY

PLANER

About the Planer Benchtop BT37 Incubator

The Planer benchtop incubator is primarily designed to grow and maintain cell cultures, particularly for IVF applications. The incubator will keep cells at an optimal temperature, humidity and gas content by maintaining a constant and clean environment for the embryo. The most common parameters for human IVF work are 37°C, 5% CO_2 in air and near 100% relative humidity.

The compact size of the Planer BT37 incubator allows it to be placed anywhere in the lab including flow cabinets and chambers. It also allows for the separation of patients by chamber; helping to increase security. Flow control is unique with continuous, pulse and bleed options all available to optimise culture conditions and reduce gas usage.

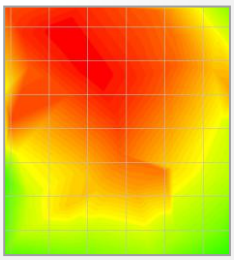
Key Benefits of the Planer Benchtop BT37 Incubator:

- Accurate temperature and humidified-gas controlled environment in a small benchtop device
- Includes inbuilt battery backup for up to 2 hours
- Accepts largest selection of culture dishes available.
- All critical operating parameters are password protected to prevent accidental or unauthorised modification
- Easy to use 2 line display with an intuitive 3 button user interface
- Set-points for each chamber can be set independently
- Network ready to allow continuous monitoring

Unrivalled Accuracy

Temperature map of incubator plate inside culture dish area showing variations of less than 0.3°C over the whole plate temperature whilst providing stable temperatures within +/- 0.2°C at dish area.

This, coupled with heated upper plates and humidification system, provides unrivalled temperature accuracy within sample dishes.



The Future for Cancer Research UK

Since the BT37's uses pre-mixed triple gas, there were initial concerns with the increased gas costs. However, once a long term gas contract has been established, gas prices are often found to be much cheaper. After negotiating a gas contract, Rosewell ordered two of the Planer Benchtop BT37 incubators and is now looking forward to seeing a rise in his fertilization rates.

About Planer

Specialising in the control of temperature and other parameters Planer helps customers achieve their scientific breakthroughs in biology, medicine and industry. Planer pioneered the development and use of many controlled temperature products as well as monitoring and logging of other key lab parameters. They hold a number of patents, and have received the Queen's Award for Technology as well as awards from the DTI for Innovation and Good Practice in Microelectronics.

Planer PLC, 110 Windmill Road, Sunbury-on-Thames, Middlesex, TW16 7HD, United Kingdom
Tel: 00 44 1932 755000 Email: sales@planer.com Web: www.planer.com