

**NEWS RELEASE - FOR IMMEDIATE RELEASE**

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**Automated Colony Counter used in Modified Ames Test  
To Precisely Predict the Genotoxicity Effects of Airborne Substances**

**Cambridge, UK:** Synbiosis, a world-leading manufacturer of automated microbiological systems, is delighted to announce that Cultex Laboratories GmbH, a German provider of novel *in-vitro* toxicology testing is using a ProtoCOL automated colony counter as part of its Ames Test methodology to determine the mutagenic effects of airborne toxins.

The ProtoCOL system at Cultex, with its specially adapted 35 mm plate holder, is being used to accurately count the numbers of mutant *Salmonella* or *E.coli* colonies that can grow on nutrient agar and histidine, after these tester strains have been directly exposed at the air/agar interface to toxic gases or cigarette smoke. This allows microbiologists at Cultex to generate standardised data on the genotoxicity of these compounds by eliminating potential processing errors, which can occur when having to manually count colonies and then type in figures.

Professor Michaela Aufderheide, Manager at Cultex Laboratories explained: "The mutagenicity of the gaseous substances we are testing is proportional to the number of colonies we observe in our Ames Test. Therefore, we need to count the colonies precisely to provide the best advice on how hazardous these compounds really are. Since we have to assess thousands of colonies each week it would be impossible for one scientist to do all the assessments we require for a standardised result."

Professor Aufderheide added: "To achieve this level of reproducibility, we have used a ProtoCOL system since 2007. As the system automates enumeration and data input, we can obtain accurate counts time after time and can confidently supply our clients with sound predictions about substance genotoxicity."

Martin Smith of Synbiosis said: "This is an exciting development for us as it is the first time the ProtoCOL is being utilised routinely as part of a commercial Ames Test. Because the system is generating good results and can be easily integrated into a GMP or GLP environment, this means the ProtoCOL automated colony counter is an intelligent option for any industrial toxicologists looking to improve the quality of their Ames Test data."

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**For Further Information Contact:**

Jayne Arthur, Synbiosis, Beacon House, Nuffield Road, Cambridge, CB4 1TF, UK.  
Tel: +44(0) 1223-727125 Fax +44 (0) 1223-727101  
Email: jayne.arthur@synbiosis.com Web: www.synbiosis.com

Professor Dr. M. Aufderheide, Cultex Laboratories GmbH, Feodor-Lynen-Straße 21  
30625 Hannover, Germany.

Tel: +49 (0) 511 563586113 Fax: +49 (0) 511 563586-69  
Web: [www.cultex-laboratories.com](http://www.cultex-laboratories.com) Email: info@cultex-laboratories.com

**Editor Contact:**

Dr Sue Pearson, Director, International Science Writer, PO Box 170, Hitchin, Hertfordshire  
SG5 3GD, UK.

Tel/Fax +44 (0) 1462-635327 Email: sue6.pearson@ntlworld.com

**Note to Editors****About Synbiosis**

Synbiosis is a world-leading supplier of integrated imaging solutions for automatic counting and analysis of microbial colonies and zone measurement. The ProtoCOL and aCOLyte systems from Synbiosis are installed in food, pharmaceutical, environmental and research microbiology laboratories world-wide. Synbiosis uses established distribution channels to market its products internationally.

Synbiosis, founded in 1998 is a division of the Synoptics Group based in Cambridge UK. The Group's other divisions, Syncroscopy and Syngene, specialise in digital imaging solutions for microscopy and molecular biology applications respectively. Synoptics currently employs 40 people in its UK and US subsidiary operation.

**About Cultex Laboratories GmbH**

Cultex Laboratories GmbH is a privately owned company that provides new exposure methods in the field of *in-vitro* inhalation toxicology for analysing airborne gases, volatile compounds and complex mixtures. The company which was formed in 2007 offers clients services including consultancy through to testing and product development from its headquarters at the Hannover Medical Park in North Germany.