

TCS Biosciences Ltd Newsletter

TCS BIOSCIENCES LTD WOULD LIKE TO INTRODUCE YOU TO OUR FIRST ARTICLE AND PRODUCT NEWSLETTER

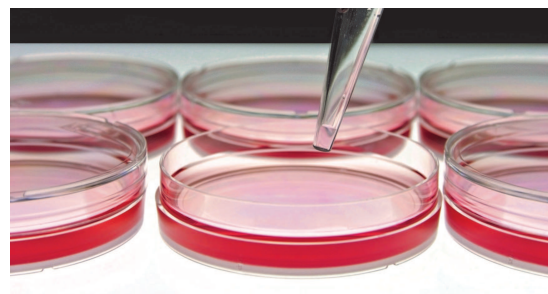
Throughout the newsletter you will find the latest news and product information from us and articles that may be of interest.

Selectrol® Freeze Dried Micro-Organisms

Selectrol® discs are first generation micro-organisms that are manufactured under licence from the Health Protection Agency Culture Collections. Selectrol® strains are fully traceable and guaranteed to be 1st generation derivatives of the original National Collection of Type Cultures (NCTC®) or National Collection of Pathogenic Fungi (NCPF®) strain. Presented as a water soluble freeze-dried disc, Selectrol® is versatile in its application for use with either plated or liquid media.

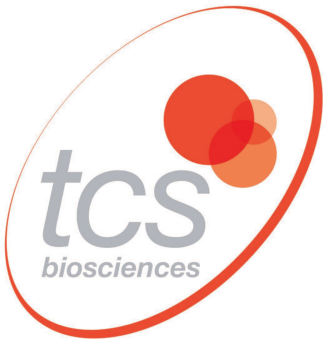
Our in-house Selectrol® quality control testing laboratory is UKAS accredited and our growing range encompasses nearly 70 strains, many of which have been added as a direct result of customer requests. As Selectrol® organisms are guaranteed to be first generation micro-organisms, they are ideal for use in accredited laboratories. Selectrol batches are tested for a range of identification and characterisation attributes and certificates of analysis for each batch can be accessed via our website:

www.tcsbiosciences.co.uk



Selectrol® Update

Twenty Selectrol® strains were submitted to an HPA laboratory for independent assessment using conventional methods, genotypic tests using partial sequencing of the 16SrRNA gene for bacterial strains, protein expression by one dimensional SDS-PAGE for protein fingerprinting of microorganisms, and batch-to-batch comparisons using Fluorescent Amplified Fragment Length Polymorphism (FAFLP) analysis to confirm genetic integrity. The results confirmed that there are no detectable differences between the parent NCTC® cultures and the TCS products submitted for testing.



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Hawaiian State

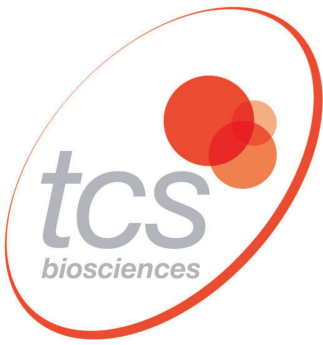
Nesiobacter exalbescens, a bacterium found only in a very remote hyper-saline lake in Hawaii, has been propelled to comparative fame because it is likely to be recognised as the state's 'Official Microbe'. The objective of this 'only in America' scheme is reported to be increasing public awareness of microbiology; it is unclear what official duties, if any, this fortunate organism may be expected to perform, and the feelings of the many organisms not considered for this honour are not recorded.

Microbial Nomenclature

The names given to microorganisms (bacteria, fungi, protozoa etc.), ostensibly to provide some information regarding their specific properties, are often polysyllabic, unpronounceable and difficult to spell. The contenders for the title of the worst offenders are currently:

Organism Name	Syllables	Letters	Classification
<i>Propionibacterium acidipropionici</i>	16	32	Bacterium
<i>Aggregatibacter actinomycetemcomitans</i>	15	36	Bacterium
<i>Corynebacterium pseudodiphtheriticum</i>	14	35	Bacterium
<i>Methanobacterium thermoautotrophicum</i>	14	35	Bacterium
<i>Anaerobiospirillum succiniproducens</i>	14	34	Bacterium
<i>Elizabethkingia meningoseptica</i>	13	30	Bacterium
<i>Acidithiobacillus ferrooxidans</i>	13	28	Bacterium
<i>Pseudo-nitzschia pseudodelicatissima</i>	13	33	Diatom
<i>Desulfosporosinus auripigmentum</i>	12	29	Bacterium
<i>Anaeromyxobacter dehalogenans</i> ,	12	28	Bacterium

Between them, these 16 microorganisms require 320 letters, contributing to a total of 135 syllables, to get their message across. Good news for the suppliers of ink cartridges for printers.



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WORLD DATA CENTRE FOR MICROORGANISMS (WDCM).



The World Data Centre for Microorganisms has ascribed WDCM numbers to strains of microorganisms used for QC of media in the food and water industries, following requests from industry representatives for unique identifiers.

'This catalogue was produced to enable broader and easier access to the reference strains listed by the ISO TC 34 SC 9 Joint Working Group 5 and by the Working Party on Culture Media of the International Committee on Food Microbiology and Hygiene (ICFMH-WPCM) in their publication Handbook of Culture Media for Food and Water Microbiology. It fulfils a need expressed by these bodies for a unique system of identifiers for strains recommended for use in quality assurance'.

Many commonly used QC strains have multiple (up to 30) different numbers, relating to the various culture collections in which they are maintained and from which they can be sourced (see example below, which applies to Selectrol strain MM30).

WDCM 00033 *Staph aureus*

AHU 1142 ; ATCC® 6538P ; BTCC 209P ; BU 395 ; CCM 2022 ; CCTM 596 ; CCUG 1828 ; CECT 240 ; CIP 53.156 ; CN 3784 ; CNCTC Mau 28/58 ; DSM 346 ; IAM 1011 ; IAM 12082 ; IFO 3061 ; IFO 12732 ; IID 671 ; IMET 10904 ; LMG 8195 ; NCIB 8625 ; NCTC 7447 ; NRRL B-313 ; OUT 8232 ; RIMD 3109007 ; FDA 209P ; FIRDI 451 ; IEM Mau 28/58 ; PCI 1209 ; PZH 8/54 ; VNIIA 209P

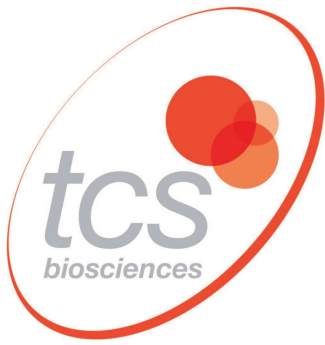
Selectrol® discs are manufactured exclusively from NCTC® (National Collection of Type Cultures)* and NCPF® (National Collection of Pathogenic Fungi) and are guaranteed first generation derivatives from the source strain.

*NCTC® and National Collection of Type Cultures are trademarks for the Health Protection Agency.

ATCC® strains are listed for reference only.

Have you downloaded our Selectrol® Technical Guide? If not [click](#)





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Europe's Leading Specialist Supplier of Animal Serum and Human Serum and Plasma

At TCS we manufacture and distribute animal and human serum and plasma products to the European pharmaceutical and diagnostics industries. Scientists need to have complete confidence that the serum they use meets their needs and that validated procedures have been used in the collection, processing and final quality control testing and that traceability through comprehensive documentation is assured. Our commitment to supplying high quality products helps our customers to excel in the manufacture of vaccines and diagnostic tests.

Serum products most commonly available:

Animal Serum

- Fetal (foetal) bovine serum - Australian, New Zealand and Brazilian origin
- Donor bovine serum - New Zealand origin
- Donor horse serum - UK origin
- Newborn calf serum
- Bovine serum albumin - Australian origin
- Goat serum
- Sheep serum



Untreated, gamma irradiated or heat inactivated serum

Throughout our 45-year history we have always worked closely with our customers to ensure that their precise specifications are met. We can supply serum as untreated, gamma irradiated or heat inactivated. Serum can be supplied as raw or sterile filtered product. Products for pharmaceutical applications are all sterile filtered to at least 0.2µm.

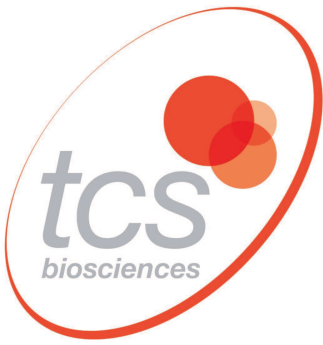
Serum suitability testing and batch reservation

We fully appreciate that quality and suitability testing is the most reliable method for determining that a batch is appropriate for use in its intended application. Once testing is complete we can supply batches of product (up to 2,000 litres) in one temperature controlled shipment, or store quantities for call-off or delivery at agreed intervals demonstrating cold chain traceability throughout. A certificate of analysis is supplied with every batch and full traceability documentation is available.

Human serum and plasma

- Normal human serum and plasma (screened) single units or mixed pool
- Human serum and plasma (disease state profiles) specific antibodies





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What you think is bad for you.....

Can you have your health and enjoy yourself, too? A growing body of research suggests you can.
From the April 2009 issue of the [Harvard Health Letter](#).

Alcohol: Moderate alcohol consumption protects against heart disease and stroke. Drinking increases “good” HDL cholesterol, reduces blood clotting factors, and may make blood vessels less vulnerable to atherosclerosis. Moderate drinkers tend to have better health and live longer than those who are either abstainers or heavy drinkers. In addition to having fewer heart attacks and strokes, moderate consumers of alcoholic beverages (beer, wine and distilled spirits or liquor) are generally less likely to suffer strokes, diabetes, arthritis, enlarged prostate, dementia (including Alzheimer's disease), osteoporosis, gallstones, enteric infections and several major cancers.

Research has found that moderate drinkers are at lower risk of suffering depression than are alcohol abstainers. Women who consumed one or two alcoholic drinks on a daily basis gained less weight during mid-life than did abstainers, according to medical researchers at Brigham and Women's Hospital in Boston.

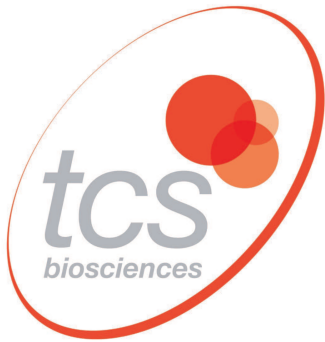
Moderate drinking and exercise appear to slow down the health deterioration that occurs with aging, according to a study of about 2,500 people aged 65 and older who were followed regularly for about eight years. Those who drank and exercised regularly had fewer difficulties with their daily activities and physical functioning.

Chocolate: Chocolate improves blood flow through the arteries that supply the heart and the brain. There's also evidence associating consumption of dark chocolate with lower levels of C-reactive protein, a marker for inflammation.

Coffee: Coffee drinkers may be less likely than coffee abstainers to have heart attacks, suffer strokes, or develop diabetes. Research also suggests that a coffee habit could be good for your brain, lowering your risk of developing Parkinson's disease, dementia, and Alzheimer's.

Sleep: A good night's sleep is good for health. “Short sleepers” put on more pounds than people who sleep seven to eight hours a night. Subpar slumbering has been linked to diabetes, heart attacks, and even early death. When you stay awake for long stretches, it wreaks hormonal havoc; levels of the stress hormone cortisol go up, and your appetite gets out of whack.

Social life: Studies have linked social networks to good health, while social isolation and loneliness are associated with cognitive decline and high blood pressure.



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TCS 2012 events

Microbe overview



We would like to thank everyone that visited our stand during the Microbe 2012 exhibition, we hope you enjoyed the horse racing competition!

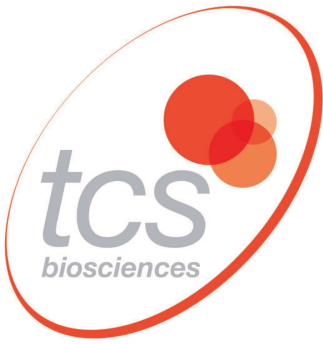
We would like to take this opportunity to thank all of those who entered and announce that the winners were:

- 1st prize - Amazon Kindle:**
Graham Smith of County Hospital Hereford
- 2nd prize - £50.00 voucher:**
Alison Byers of Portsmouth Hospital
- 3rd prize - £20.00 voucher:**
Samantha Law of NCIMB

Contact Us

If you would like anymore information on our products or would like a price list please contact us on the details below:

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Word search

microbiology	pathology
lysed	contamination
culture media	selectrol
giemsa	malaria
haemoglobin	pharmaceutical
elisa	optimal
dyes	plasma
serology	protease
origin	albumin
horse	diagnostic
haematology	anti-coagulant
blood	bacteria
microorganisms	biochemical
may grunwald	sickle
reagents	clinical
protein	serum
stains	lectins
bacteriology	endotoxin
bovine	newborn
fetal	

Thoughts of the day:

The early bird gets the worm, but the second mouse gets the cheese.

Before you criticise somebody, walk a mile in their shoes. That way, when you do criticise them, you'll be a mile away and have their shoes.

If at first you don't succeed, skydiving may not be for you.

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