

Cellular Bioengineering, Inc.

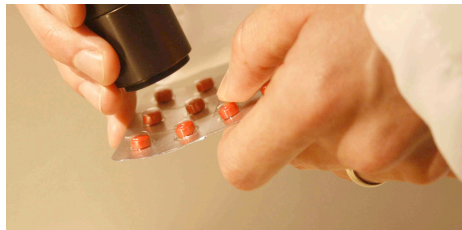
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BREAKTHROUGH TECHNOLOGY ENABLES EDIBLE TRUTAG™ TO PREVENT COUNTERFEIT MEDICINE

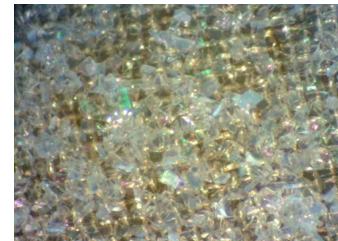
Honolulu, Hawaii – (May 26, 2009) Cellular Bioengineering, Inc. (CBI) announces it is developing a novel technology that can help prevent not only counterfeit medicine and other consumables, but can also be used in a wide range of often-counterfeit goods from airplane parts, great works of art, currency, electronic components, high value added ingredients, to cosmetics and luxury goods.



High purity silica TruTags™



Reading tags through blisterpak.

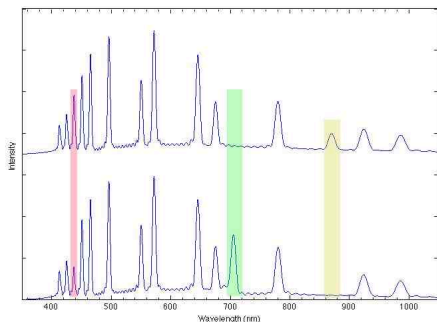


TruTags™ in 45 μm sieve.

CBI's TruTag™ presents a breakthrough in the fight against counterfeit medicine, food, and consumer goods. The tags are made of the highest purity silica, rendering them biologically inert and edible. Each tag contains a custom-manufactured 'spectral signature' chosen from over one trillion possibilities. The unique choice of tag signature and product combination is the TruTag™ key to confirming the authenticity of the product, yet each tag costs less than a penny.

"The ability to authenticate and track individual pills is an exciting and potentially valuable tool in the effort to fight counterfeit pharmaceuticals," said Paul Kocher, Founder and Chief Scientist, Cryptography Research, Inc.

"I believe CBI is breaking ground on a new modality of safety, assurance and information essential for consumers and the U.S. Government," said Admiral Thomas Fargo USN (Ret), Former Commander U.S. Pacific Command. "This project has the potential to save lives and make a significant contribution towards the safety and authentication of wide ranging goods and products."



Spectral signatures can be individually tailored. Two examples here illustrate fine control of spectral peak amplitude.

Ten percent of all drugs sold worldwide are counterfeit according to FDA estimates. Annual global trade in counterfeit goods is estimated to be \$600 billion and growing. Counterfeit goods and drugs pose a real threat to consumer safety as well as to companies whose brands are compromised and profits stolen.

At present, the primary means of tracking and verifying is through packaging and labeling. However, technologies such as radio-frequency identifiers (RFIDs) are not amenable to direct tagging of small or consumable items. The cheapest RFIDs are also relatively expensive at 7 to 15 cents each. Package-based security is also inherently weak since the valued product is not the package, but the item contained.

Trutag's™ signature can be measured and authenticated via a portable spectrometer-based optical reader. The TruTag™ system can be designed to be either self-authenticating or can rely on external product information stored remotely, for example, in a secure online database. The self-authentication process includes both a code on the packaging and a code stored in the tag combined to form a digital signature. A

security violation would result if someone tampers with either the container or its contents. Each tag may also reference a custom database, where additional information about the item can be stored, such as a link to an e-pedigree track and trace system.

TruTags™ are passive, inconspicuous and can be attached either to the outside of items to be read, for example, through clear plastic blister packs, or mixed into items as a forensic excipient, to be read as part of an inspection process or investigation by authorized security or quality assurance personnel.

The microtags are encoded with information purely in their depth, rather than along their surface. They can be broken into pieces, with each piece still containing all of the encoded information. This makes porous silica microtags suitable for forensic applications, where the tag may be subjected to rough handling. As long as any piece of the tag can be recovered, the information is not lost.

So, even after the use and disposal of a product, a silica microtag will be expected to survive. This is in contrast to RFID, which requires internal electrical connectivity, and UPC codes which require that the surface of the code remain intact.

CBI is developing TruTag™ technology with the award of a cooperative agreement from the U.S. government to help combat counterfeit drugs, and has established collaboration with Silicon Kinetics, Inc. of San Diego, California and its porous silicon labs in Maui.

“We are grateful to the federal government for taking a proactive approach to a problem that puts lives at risk. Drug counterfeiting is a problem costing billions of dollars and claiming lives. According to the World Health Organization, annual earnings from counterfeit and substandard medicines are in excess of \$32B and likely higher since counterfeiting is difficult to detect, investigate and quantify.” — Dr. Michael O’Neill, Chief Technology Officer and Product Security Division lead at Cellular Bioengineering.

About CBI

CBI invents, develops, and acquires disruptive technologies to transform novel ideas and innovations to commercial products. The Company has an Intellectual Property portfolio of over 25 patents and patent applications, and four operating divisions including:

- 1) DeconGel™ is a commercialized product with superior efficacy for the containment and decontamination of radioactive and nuclear spills, and with additional applications in industrial cleaning and environmental management.
- 2) Eyeugenix™ is developing a bio-integrating artificial cornea which holds the promise of returning sight to 10 million people worldwide who are blind from corneal disease.
- 3) TruTag™ is a nanoporous silica microtag which can be used to authenticate valuable assets, from great works of art and luxury goods to pills and capsules to be ingested, protecting consumers from loss and the health risks of counterfeit products.
- 4) E Canary is bio sensor comprised of living cardiac cells on a CCD chip which can detect both known and unknown harmful threats in the environment such as chemical contaminants and biologic weapons.

Please go to www.trutags.com and www.cellularbioengineering.com for further information.

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