

THE CELLBOT COLONY ANALYZER FOR THE DIGITAL AGE

Instant, lab-grade accuracy for busy scientists



Distributor:



https://app.scientist.com/domain_switcher?redirect=/providers/checkcells-inc



Reduce Manual Workload, Protect Scientists, and Boost Output

Manually counting colonies forces microbiologists to spend hours hunched over stacks of petri dishes, an exhausting posture that leads to discomfort and strain. CheckCells eliminates this burden by automating colony counting: with just a single plate image, labs receive rapid, standardized results that cut human variability, save valuable time, and accelerate scientific throughput.



Instant, lab-grade accuracy

- Real-time deep-learning vision quantifies bacterial loads down with 99.9% precision, exceeding the golden standard of manual counting.

Plug-and-play automation

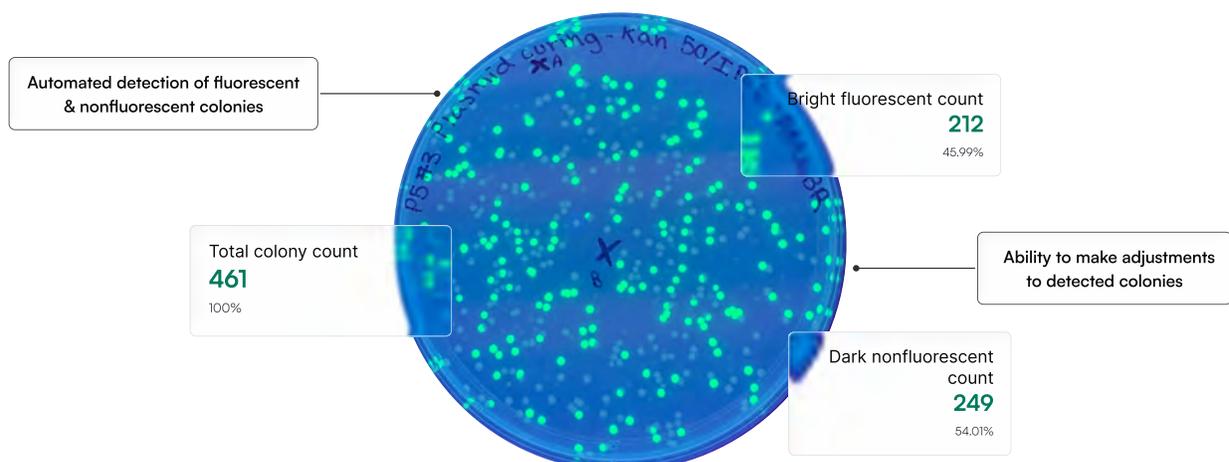
- Easily captures images of culture plates; cloud AI auto-calibrates to media type, streams dashboards to LIMS, and cuts manual counting time per plate from minutes to milliseconds.



From Analog to AI

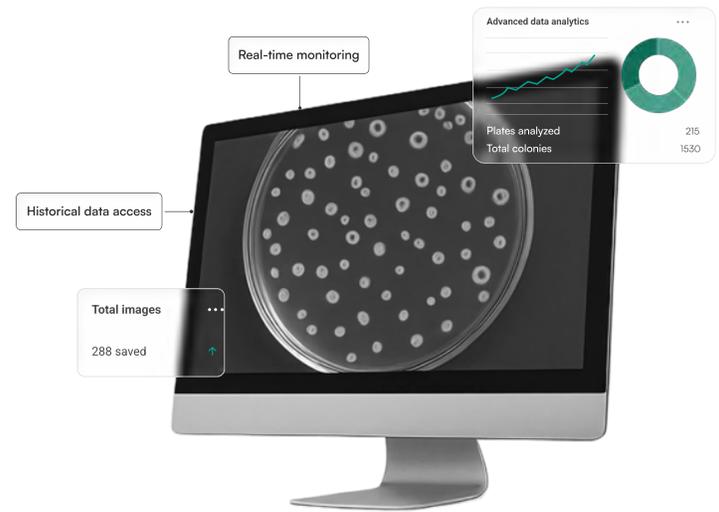
Automated recognition of phenotypic variations including colony size, shape, pigmentation, and fluorescence.

Multiple colony types on the plate



Automated Traceability for Culture & Sensitivity (C&S) Testing

Our system enables real-time oversight of laboratory work, from specimen processing through culture reading and sensitivity testing, with full traceability and digital audit trails. Built-in workflow analytics enhance productivity, ensure accuracy, and maintain consistency across every step.



Culture Reading (C):

- Automated colony counting (CFUs)
- Recognition of discrete vs. confluent colonies
- Interpretation of hemolysis patterns (BAP)
- Differentiation of lactose fermenters vs. non-fermenters (MacConkey)
- Detection of species-specific color reactions (chromogenic media, XLD/Hektoen, MSA, Candida plates)
- Identification of mixed vs. pure cultures

Sensitivity Reading (S):

- Automated measurement of zone diameters around Kirby-Bauer diffusion disks.
- Translation of zone sizes into S / I / R categories using CLSI/EUCAST standards.
- Digital records of plate + disk images for audit trails and LIS reporting.

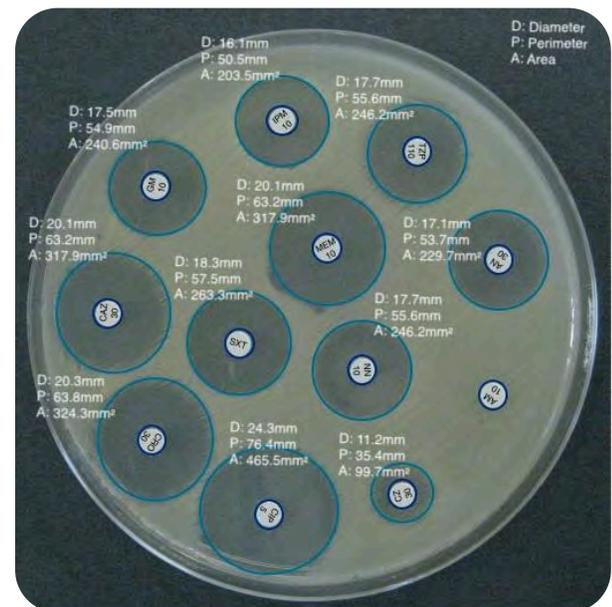
Specimen Types and Culture Media

Supported specimens

Blood, Urine, CSF, Sterile fluids (peritoneal, synovial, etc.), Respiratory samples (throat, nasal, sputum, BAL), Wounds, pus, abscess aspirates, tissue biopsies, Stool (enteric pathogens), Vaginal swabs

Supported media

BAP (hemolysis), MacConkey (lactose fermentation), Chocolate (fastidious organisms), MSA (staphylococci), XLD / Hektoen (enteric pathogens, H₂S production), Campy agar (Campylobacter, stool cultures), Chromogenic plates (UTI, MRSA, VRE, Candida), Sabouraud (yeasts, molds), TSA (total viable count), Kirby-Bauer plates with antibiotic disks



Antimicrobial susceptibility resistance diffusion test

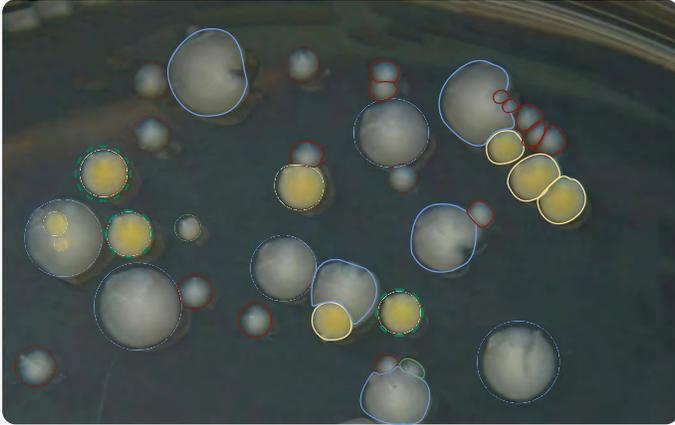
The CellBot - One Solution, Multiple Applications

The CellBot software is compatible with diverse microbiological applications: clinical diagnostics, food safety, water quality, and veterinary testing.

Mixed Culture Plate ▾

Colony ID:

- E. coli
- C. striatum
- S. aureus
- E. faecalis



Colony count

- E. coli 82
 Show discrete colonies
- C. striatum 13
 Show discrete colonies
- S. aureus 75
 Show discrete colonies
- E. faecalis 121
 Show discrete colonies

View Move Add

Zoom + Zoom -

Save Changes

- **Multi-phenotype detection:** Differentiate between multiple colony types on the same plate.

Bi-plate: MacConkey + Blood Agar ▾

A: MacConkey

Growth: **Heavy**

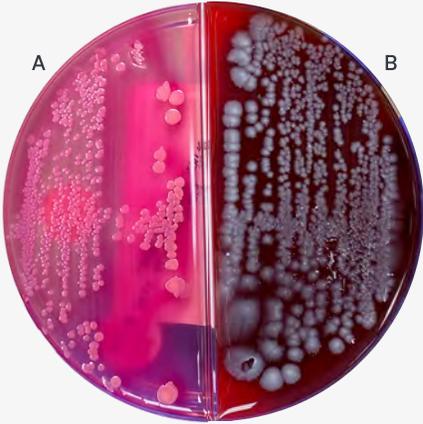
Colony color: pink to rose
Lactose Fermenter (LF)

Morphology: **Medium, convex; no swarming, non-mucoid**

Interpretation: **LF GNB present**

Zoom + Zoom -

Save Changes



B: Blood Agar

Growth: **Heavy**

Colony appearance: **Gray, moist, non-mucoid**

Hemolysis: **None to weak**

Interpretation: **Enteric GNB phenotype; no β-hemolysis**

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Preliminary ID:	Confidence
Escherichia coli LF, non-mucoid colonies consistent across MAC and BA	High
Antibiotic Guidance <i>confirm with AST & local antibiogram</i>	
Often Active: Nitrofurantoin, Fosfomycin, TMP-SMX, Ceftriaxone	
Variable Resistance: Ampicillin, Amox-Clav, Ciprofloxacin	
Reserve / MDR: Piperacillin-Tazobactam, Carbapenems	

- **Cross-plate comparison:** Evaluate colony growth patterns across multiple samples simultaneously.

All-in-One Solution for Accurate Colony Analysis

The CellBot system comes as a fully integrated solution, combining compact hardware with intuitive software for industry-leading Limit of Detection of 0.01 mm and efficient colony enumeration.

Key Benefits

- Fully synchronized hardware and software for streamlined colony counting.
- Supports a wide range of specimen types and media.
- Audit-ready data storage compliant with regulatory standards.



CellBot ECON throughput: 30 plates/hour

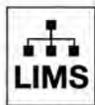
CellBot PRO throughput: 120 plates/hour

Limit of detection: 0.01mm

Size: 16in x 13in x 13in

FDA Compliant

Our system maintains FDA 21 CFR Part 11 compliance, ensuring accuracy without compromising sensitive results. The AI model is fixed and generates repeatable results, with full audit logs securely stored and accessible at any time.



IN ACCORDANCE WITH



Data Privacy of the Patient

At CheckCells, Inc., patient privacy and AI safety are of paramount importance. Sensitive data remains securely stored within the laboratory and never leaves its environment. They are not shared externally and are never used to train or adapt our foundational AI models. This ensures strict confidentiality while allowing laboratories to benefit from safe, advanced, and reliable AI insights.