## StrictAna Blood Agar Plate

Isolate Strict Anaerobes with Confidence

Struggling to isolate strict anaerobes from mixed cultures overrun by facultative bacteria? The StrictAna Blood Agar Plate is your solution. Designed to cultivate fastidious strict anaerobes, this plate prevents interference from facultative organisms, ensuring clear and accurate results for clinical and research applications.

### Composition and Mechanism

Built on the trusted OxyPRAS Plus Brucella Blood Agar foundation, the StrictAna plate is enhanced with gentamicin, a bactericidal aminoglycoside. Gentamicin selectively inhibits common facultative organisms like *Staphylococcus spp.*, *E. coli*, and *Proteus spp.* through an oxygen-dependent active transport mechanism<sup>1</sup>. This ensures strict anaerobes thrive unaffected, as gentamicin's action requires oxygen, which anaerobes do not utilize.

#### Why StrictAna?

**Targeted Inhibition**: Prevents overgrowth of facultative bacteria, ensuring clear isolation of strict anaerobes.

**Proven Need**: Anaerobes constitute, on average, 38% of microbial isolates in infections but are often overlooked in mixed cultures.<sup>3</sup>

**Versatile Application**: Ideal for isolating strict anaerobes from complex samples. **Overcomes Common Challenges**: Reduces contamination from common skin flora and handles motile bacteria, like *Proteus spp.*, effectively.

#### Scientific Backing

A study of 239 patients with an infected wound across the span of two years yielded these results: "The most common species were Gram-negative (57.9%), amongst which the most prevalent were *Pseudomonas aeruginosa* (40.2%), *Escherichia coli* (20.7%), *Proteus mirabilis* (11.2%), and *Acinetobacter baumannii/haemolyticus* (9.5%). Gram-positive bacteria were observed in 36.6%, *Staphylococcus aureus* (79.4%) being the most predominant species." Yet, anaerobes, often omitted in such analyses, constitute 38% of microbial isolates on average<sup>3</sup>, making them as critical as facultative organisms in causing infections. Imagine trying to isolate an anaerobe from such a mixed culture, especially with motile organisms like *Proteus* which will swarm the entire dish. The StrictAna Blood Agar Plate addresses this gap by enabling precise isolation of strict anaerobes, even in polymicrobial samples.

# Organism Brucella StrictAna 72 hr growth at 37C E. coli P. mirabilis S. aureus Polymicrobial E. coli, P. mirabilis S. aureus B. fragilis (strict)

#### References

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- 3. Bowler, P. G., Duerden, B. I., & Armstrong, D. G. (2001). Wound microbiology and associated approaches to wound management. *Clinical microbiology reviews*, *14*(2), 244–269. https://doi.org/10.1128/CMR.14.2.244-269.2001