

Revolutionizing Respiratory Diagnostics with NeXGen Fungal/AFB Hybrid-capture NGS

Why Hybrid-Capture NGS with BAL Samples?

- Solve Diagnostic Challenges / Increase Diagnostic Confidence: Overcome limitations of traditional methods in diagnosing complex fungal and AFB pulmonary infections. Providing you with greater confidence in diagnostic and treatment decisions.
- Improve Patient Outcomes: Achieve earlier initiation of appropriate therapy, reducing morbidity and mortality. Guide personalized treatment decisions with precise species-level identification and detection. Hybrid-capture NGS generally offers higher specificity because it focuses on predefined target sequences. This reduces the interference from background DNA, leading to more accurate identification of specific pathogens.
- Broad Application / Comprehensive Detection: Valuable for immunocompromised patients, chronic lung disease, suspected invasive fungal infections, suspected of pulmonary tuberculosis or NTM infections, and critically ill patients.

• Improve Diagnostic Accuracy with Targeted Pathogen DNA Enrichment From BAL Samples: The utilization of BAL samples presents the opportunity for direct sampling of suspected infection sites, with reduced upper airway contamination, often contains higher pathogen loads, while reflecting the pulmonary environment.

The enrichment step in hybrid capture NGS significantly enhances sensitivity. By increasing the relative abundance of target DNA, it allows for the enhanced detection of even low levels of pathogens often missed by WGS. In WGS and shotgun assays, the sheer volume of non-target DNA can often dilute pathogen DNA, making it more difficult to detect.

- **Rapid Results:** Enable timely initiation of appropriate therapy with a significantly faster turnaround time compared to traditional cultures.
- Support Antimicrobial Stewardship: Promote targeted therapy and minimize the use of broadspectrum antibiotics.

Empowering Diagnosis Across Diverse Populations

For difficult pulmonary infections, bronchoalveolar lavage (BAL) combined with
Next Generation Sequencing (NGS), particularly hybrid-capture NGS, provides a superior diagnostic approach.
BAL offers a direct and less contaminated sample, while hybrid-capture NGS enables precise identification of elusive fungal or acid-fast bacterial pathogens, leading to diagnosis and improved patient care.
Brock Neil, Clinical Laboratory Director, Eurofins Viracor





NeXGen Fungal/AFB (BAL) Hybrid-Capture NGS: A Paradigm Shift

Panel / Test Code	Sample Type	Sample Volume	Shipping Information
33457	BAL	2.0 mL (0.5 mL)	Sterile pour off tube, shipped frozen (Mon-Fri)
33356	Whole Blood	10 mL Whole blood collected in a Streck Cell-Free Tube	Ambient temperature, received within 7-days of collection



Testing Methodology: Hybrid-capture NGS

Turn-around-time: <72 hours after receipt of specimen.

Reporting: Only Detected organisms reported along with their genomic targets.

This assay has been developed to detect medically relevant and emerging microorganisms known to cause invasive fungal or AFB disease.





View the detailed Organism Dataset PDF







Get Fast Accurate Results

Find out more at <u>eurofins-viracor.com</u> or contact us at <u>info@eurofins-viracor.com</u> or call 800-305-5198



About Viracor

With over 35 years of diagnostic expertise in infectious disease, immunology and allergy testing for immunocompromised and critical patients, Eurofins Viracor is passionate about delivering accurate, timely and actionable results, never losing sight of the connection between the testing it performs and the patients it serves.

Eurofins Viracor is a subsidiary of Eurofins Scientific (EUFI.PA), a global leader in bio-analytical testing, and one of the world leaders in genomic services. For more information, please visit <u>eurofins.com</u> and <u>eurofins-viracor.com</u>



