

eNAT®

Nucleic acid collection and preservation medium





Copan eNAT® System is intended to collect, transport, and preserve clinical specimens to be analyzed by nucleic acids amplification techniques.

eNAT® medium stabilizes and preserves RNA/DNA for prolonged periods and is compatible with commercial nucleic acid extraction and amplification platforms.



FLOQSwabs®



Ensure a quick, capillarity-driven sample uptake and a superior elution of the biological specimen, expanding downstream diagnostic testing capabilities.

Compatible with molecular assays



eNat® has been validated with numerous molecular assays. Its format is suitable for automatic specimen processors in space-saving, instrument-ready tubes.

DNA and RNA stabilization



eNat® Guanidine thiocyanate-based medium inactivates nucleases and stabilizes RNA and DNA of Viruses, Bacteria, Chlamydia, Protozoa, and Mycoplasma.

Inactivation within 30 minutes



eNat® completely inactivate microbial viability within 30 minutes to ensure a safe specimen handling, processing, and transport.

Preservation

eNAT® Performance

Copan eNAT® medium preserves nucleic acids for:

- Up to 4 weeks at RT and 4°C¹
- Up to 6 months at -20°C to -80°C

According to the vast scientific literature, eNAT® characteristics successfully preserved microbiome samples up to 30 days at room temperature².



FLOQSwabs®

Cut out for everyone

FLOQSwabs® offer **variable sizes, diameters, breaking points and tip shapes to be used in plenty of applications**. This made FLOQSwabs® well-tolerated alternative to invasive, painful, and costly collection procedures^{7,8}.

**Do you have a specific application in mind?
Choose the right FLOQSwabs®!**



Fields of application

Preanalytics made different



Respiratory Diseases^{3,4,5}

Regular, minitip and flexible minitip



Gastrointestinal Diseases^{6,7,8}

Regular



STI & HPV^{9,10,11}

Regular and L-shape



Genetics & Microbiome^{13,14,15}

Regular

Laboratory

Handling & processing

Samples collected with Copan eNAT® are suitable for commercial nucleic acid extraction and amplification platforms.

Scientific literature reports sample collection and transport with eNAT® prior to many downstream processes:

- Molecular-based assays^{9,15,16,17,18,19,20,21}
- Next Generation Sequencing^{13,14,22,23,24}

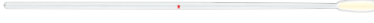

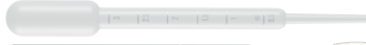









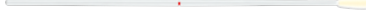



eNAT®

Ordering information

Choose between different tube sizes and medium fill volumes, in bulk packs or in combination with either FLOQSwabs®.

Cat. N.	Description	Pack size	Sample*
608C	1ml eNAT® transport and preservation medium in 12x80mm screw cap tube 	300 pieces 6 boxes of 50 pieces	
608CS01M	1ml eNAT® transport and preservation medium in 12x80mm screw cap tube + 1 minitip FLOQSwabs® 	500 pieces 10 boxes of 50 pieces	nasal and urethral
608CS01P	1ml eNAT® transport and preservation medium in 12x80mm screw cap tube + 1 thin & flexible FLOQSwabs® 	500 pieces 10 boxes of 50 pieces	naso-pharyngeal

Code	Description	Pack size	Sample*
608CS01R	1ml eNAT® transport and preservation medium in 12x80mm screw cap tube + 1 regular FLOQSwabs®  	500 pieces 10 boxes of 50 pieces	nasal, throat, vaginal, groin, armpit, rectal, wound, buccal and faeces
6E021S	1ml eNAT® transport and preservation medium in 12x80mm screw cap tube, + 1 regular FLOQSwabs® +1 Pasteur pipet   	300 pieces 6 boxes of 50 pieces	nasal, throat, vaginal, groin, armpit, rectal, wound, buccal, faeces and urine
606C	2ml eNAT® transport and preservation medium in 12x80mm screw cap tube 	300 pieces 6 boxes of 50 pieces	
606CS01L	2ml eNAT® transport and preservation medium in 12x80mm screw cap tube + 1 L-shape FLOQSwabs®  	500 pieces 10 boxes of 50 pieces	cervical
606CS01M	2ml eNAT® transport and preservation medium in 12x80mm screw cap tube + 1 minitip FLOQSwabs®  	500 pieces 10 boxes of 50 pieces	nasal and urethral
606CS01P	2ml eNAT® transport and preservation medium in 12x80mm screw cap tube + 1 thin & flexible FLOQSwabs®  	500 pieces 10 boxes of 50 pieces	naso-pharyngeal
606CS01R	2ml eNAT® transport and preservation medium in 12x80mm screw cap tube + 1 regular FLOQSwabs®  	500 pieces 10 boxes of 50 pieces	nasal, throat, vaginal, groin, armpit, rectal, wound, buccal and faeces

*Suggested table. Please refer to your GLP procedures to choose the most appropriate device for the specific sampling site

Scientific references

All the independent studies we cited in this product focus are listed here.

1. Hasan MR et al (2012) Short-term stability of pathogen-specific nucleic acid targets in clinical samples. *J Clin Microbiol.* 50(12):4147-50
2. Young RR et al (2020) Long-term stability of microbiome diversity and composition in fecal samples stored in eNAT medium. *Microbiologyopen.* 9(7):e1046
3. Lee J et al (2018) Evaluation of Allplex Respiratory Panel 1/2/3 Multiplex Real-Time PCR Assays for the Detection of Respiratory Viruses with Influenza A Virus subtyping. *Ann Lab Med* 38(1): 46-50
4. Ordonez-Mena JM et al (2020) Relationship between microbiology of throat swab and clinical course among primary care patients with acute cough: a prospective cohort study. *Fam Pract* 37(3):332-339
5. Mhimbira F et al (2019) Prevalence and clinical significance of respiratory viruses and bacteria detected in tuberculosis patients compared to household contact controls in Tanzania: a cohort study. *Clin Microbiol Infect* 25(1): 107.e1-107.e7
6. Liu J et al (2016) Optimization of Quantitative PCR Methods for Enteropathogen Detection. *PLoS One* 11(6): e0158199
7. Pernica J et al (2018) Short-course antimicrobial therapy for paediatric respiratory infections (SAFER): study protocol for a randomized controlled trial. *Trials* 19(1):83
8. Pichon M et al (2020) Diagnostic Accuracy of a Noninvasive Test for Detection of *Helicobacter pylori* and Resistance to Clarithromycin in Stool by the Amplidiag H. pylori+ClariR Real-Time PCR Assay. *J Clin Microbiol* 58(4): e01787-19
9. Yar DD et al (2016) Genotypic characterisation of human papillomavirus infections among persons living with HIV infection; a case-control study in Kumasi, Ghana. *Trop Med Int Health* 21(2):275-82
10. Juliana NCA et al (2020) The Prevalence of *Chlamydia trachomatis* and Three Other Non-Viral Sexually Transmitted Infections among Pregnant Women in Pemba Island Tanzania. *Pathogens* 9(8):625
11. Wendland EM et al (2019) Evaluating sexual health in sex workers and men who have sex with men: the SMESH cross-sectional protocol study. *BMJ Open.* 9(11):e031358
12. Susic D et al (2020) Microbiome Understanding in Maternity Study (MUMS), an Australian prospective longitudinal cohort study of maternal and infant microbiota: study protocol. *BMJ Open* 10: e040189
13. Rooney AM et al (2020) Each Additional Day of Antibiotics Is Associated With Lower Gut Anaerobes in Neonatal Intensive Care Unit Patients. *Clin Infect Dis* 70(12): 2553-2560
14. Ata B et al (2019) The Endobiota Study: Comparison of Vaginal, Cervical and Gut Microbiota Between Women with Stage 3/4 Endometriosis and Healthy Controls. *Sci Rep* 9, 2204
15. Roy C et al (2020) Performance Evaluation of the Novodiag Bacterial GE+ Multiplex PCR Assay. *J Clin Microbiol.* 58(10):e01033-20
16. Thomas PPM et al (2019) Sexually Transmitted Infections and Behavioral Determinants of Sexual and Reproductive Health in the Allahabad District (India) Based on Data from the ChlamIndia Study. *Microorganisms.*7(11):557
17. Falaschi Z et al (2020) Chest CT accuracy in diagnosing COVID-19 during the peak of the Italian epidemic: A retrospective correlation with RT-PCR testing and analysis of discordant cases. *Eur J Radiol.* 130:109192
18. Welch SR et al (2020) Analysis of Inactivation of SARS-CoV-2 by Specimen Transport Media, Nucleic Acid Extraction Reagents, Detergents, and Fixatives. *J Clin Microbiol.* 58(11):e01713-20
19. Narchi H et al (2020) Nasopharyngeal Isolates from a Cohort of Medical Students with or without Pharyngitis. *Sultan Qaboos Univ Med J.* 20(3):e287-e29
20. Nagel A et al (2020) Characterization of a universal screening approach for congenital CMV infection based on a highly-sensitive, quantitative, multiplex real-time PCR assay. *PLoS One.* 15(1):e0227143

21. Lee YM et al (2020) Monitoring environmental contamination caused by SARS-CoV-2 in a healthcare facility by using adenosine triphosphate testing. *Am J Infect Control* 48(10): 1280-1281
22. van Pamelen J et al (2020) Alterations of Gut Microbiota and the Brain-Immune-Intestine Axis in Patients With Relapsing-Remitting Multiple Sclerosis After Treatment With Oral Cladribine: Protocol for a Prospective Observational Study. *JMIR Res Protoc.* 9(7):e16162
23. Ciardiello T et al (2020) Effects of Fermented Oils on Alpha-Biodiversity and Relative Abundance of Cheek Resident Skin Microbiota. *Cosmetics* 7(2):34
24. Cieplik F et al (2020) Oral Health, Oral Microbiota, and Incidence of Stroke-Associated Pneumonia-A Prospective Observational Study. *Front Neurol.* 11:528056



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