

SMART **ENAT**®

Smart Delivery System for Nucleic Acids Preservation Medium





Copan patented SMART push & turn activation and delivery system is a post-collection, high-performance yet intuitive cap that avoids unwanted media spillage or contact, facilitating self-sampling at home. SMART-eNAT® combines the SMART-cap[™] with eNAT® and FLOQSwabs®, stabilizing and preserving RNA/DNA for prolonged periods. SMART-eNAT® is intended to collect, transport, and preserve clinical specimens to be analyzed by nucleic acids amplification techniques.



SMART-CAP™

Unique push & turn activation and delivery system that makes sample collection easy, while guarding against unwanted spillage or contact.



EASY TO USE

SMART-eNAT[®] has been designed keeping the end-user in mind. Only a few simple steps are required to collect the sample.

VERSATILE

SMART-eNAT[®] is available paired with three different swab shafts specific for vaginal, buccal, and rectal collection or in a kit with a swab for microbiome research purposes.

eNAT®

A liquid-based molecular medium that quickly inactivates viruses and bacteria while preserving nucleic acids at room temperature to reduce turnaround time and increase safety.



eNAT[®] Performance

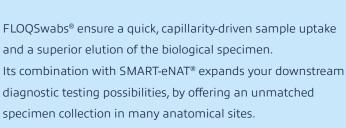
Copan eNAT[®] medium preserves nucleic acids for:

- Up to 4 weeks at RT and 4C°1
- Up to 6 months at -20°C to -80°C

According to the vast scientific literature, eNAT[®] characteristics succesfully preserved nucleic acids from fecal samples up to 30 days at room temperature².



Cut out for everyone

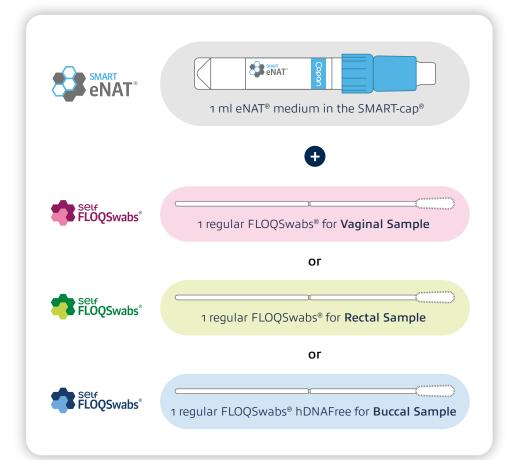


Discover why we call them "the perfect collection device."

Fields of application

Preanalytics made different





Combinations

The SMARTer way!

SMART-eNAT[®] expresses its full potential when paired with the right FLOQSwabs[®]. Choose the vaginal swab, rectal swab or the buccal hDNAfree FLOQSwabs[®].



Laboratory

Handling & processing

Samples collected with Copan SMART-eNAT[®] are suitable for commercial nucleic acids extraction and amplification platforms.

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

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

Self-Collection

Collect your nucleic acids like a pro

Reaching end-users and donors in the comfort of their homes is critical to delivering highly personalized health information and suggestions. That's why the Self-collection of biological samples has become increasingly important in genetics, genomics, and microbiome research. SMART-eNAT® enables a clean and safe collection of nucleic acids at home, making DNA and RNA sampling easy and accessible to many users in many different settings.





Ordering information

SMART-eNAT[®] is available in combination with FLOQSwabs[®].

Cat. N.	Description	Pack size	Sample*
6E099S	1 ml eNAT [®] medium in the smart cap	300 pieces	
5U175S01	1 regular FLOQSwabs®	600 pieces	Vaginal
5U173S01	1 regular FLOQSwabs® hDNAfree Free	600 pieces	Rectal
5U174DS01	1 regular FLOQSwabs®	600 pieces	Buccal
Cat. N.	Description	Pack size	Sample*
70U001N**	1 ml eNAT® medium in the smart cap + 1 regular FLOQSwabs®	300 pieces (6 boxes of 50 pieces)	Nasal, throat, vaginal, skin, rectal, wound, buccal and faeces

*Suggested table. Please refer to your GLP procedures to choose the most appropriate device for the specific sampling site ** NO CE IVD - not for clinical use

Scientific references

All the 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
- 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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