## Instructions for use

# **ENTEROVIRUS ELITe Standard**

plasmid DNA standard for quantitative assay











#### **CHANGE HISTORY**

Rev.	Notice of change	Date (dd/ mm/yyyy)
04	Update of the paragraph "Other product required". Update of the paragraph "Notice to the users". Update of the paragraph "Warnings and precautions". Update of the paragraph "Symbols" with the symbol "Consult instructions for use"	09/09/2025
	Extension of the use of the product in association with ELITe BeGenius® instrument (REF INT040). Compliance with the Regulation (EU) 2017/746 on in vitro diagnostic medical devices (IVDR) requirements.	
03	NOTE	18/10/2024
	Composition of the product remain unchanged	
	New graphics and content setting of the IFU	
02	the volume in the tubes has been changed (from 120 to 160 uL) the number of the analytical sessions to be carried out in association with the "ELITe InGenius" system or in association with other validated systems has been specified.	14/10/2019
00–01	new product development and succeeding changes	_

## **NOTE**

The product batches identified by the following LOT numbers are still placed on the market as per IVDD till to their expiration dates, according to Article 110 of IVDR. If you have those product batches, please contact ELIT-echGroup staff to request the related previous revision of IFUs.

Those batches of Standard are technically compatible with the new IVDR version of the amplification kit and can be used, until exhausted, in association with the new IVDR version of the amplification kit and in accordance with its intended use.

PRODUCT REF.	<u>Lot Number</u>	Expiry date
STD076PLD	U0924-036	31/08/2026
STD076PLD	U1223-056	31/12/2025
STD076PLD	U0823-043	31/07/2025

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## 1 INTENDED USE

The product **ENTEROVIRUS ELITe Standard** is an *in vitro* diagnostic medical device intended to be used by healthcare professionals as known quantity DNA standard in nucleic acids reverse transcription and Real-Time PCR assay for the detection and quantification of the RNA of the Human Enterovirus (EV) in association with **ENTEROVIRUS ELITE MGB® Kit** and the **ELITe InGenius®** and **ELITe BeGenius®** instruments.

### 2 PRODUCT DESCRIPTION

The product supplies the **EV Q - PCR Standard**, four levels of Tris-HCl and EDTA stabilized solutions of plasmid DNA at known titre, each aliquoted into **two ready- to use test tubes**.

The plasmid DNA contains a **5'-UTR** cDNA region of Enterovirus. The detection and quantification of target DNA, using **ENTEROVIRUS ELITE MGB Kit** product in association with **ELITE InGenius** and **ELITE BeGenius** instruments, allows to calculate the Calibration Curve of the system (product batch and instrument) for EV RNA quantification.

The product contains sufficient reagents for 8 separate sessions on ELITe InGenius and ELITe BeGenius, (4 sessions each tube), with 10  $\mu$ L used per reaction.

#### **NOTE**

The plasmid DNA concentration in copies/mL was determined through absorbance measurement by spectro-photometer. There are no WHO approved standards for the target genomic DNAs.

## 3 MATERIALS PROVIDED IN THE PRODUCT

#### Table 1

Components	Description	Quantity	Classification of Hazards
EV Q - PCR Standard 10 <sup>5</sup> ref. STD076PLD-5	plasmid DNA solution in tube with <b>RED cap</b>	2 x 160 µL	-
EV Q - PCR Standard 10 <sup>4</sup> ref. STD076PLD-4	plasmid DNA solution in tube with <b>BLUE cap</b>	2 x 160 µL	-
EV Q – PCR Standard 10 <sup>3</sup> ref. STD076PLD-3	plasmid DNA solution in tube with <b>GREEN cap</b>	2 x 160 µL	-
EV Q - PCR Standard 10 <sup>2</sup> ref. STD076PLD-2	plasmid DNA solution in tube with <b>YELLOW cap</b>	2 x 160 µL	-

## 4 MATERIALS REQUIRED BUT NOT PROVIDED IN THE PRODUCT

- · Laminar airflow hood.
- Disposable powderless nitrile gloves or similar material.
- · Vortex mixer.
- Bench microcentrifuge (~13,000 RPM).
- Micropipettes and sterile tips with aerosol filter or sterile positive displacement tips (volume range: 0.5-1000 µL).

## 5 OTHER PRODUCTS REQUIRED

The reagents for the reverse transcription and Real-Time amplification and the consumables **are not** included in this product.

To perform the assay the following products are required:

#### Table 2

Instruments and softwares	Products and reagents
ELITe InGenius (ELITechGroup S.p.A., EG SpA, ref. INT030) ELITe InGenius Software version 1.3.0.19 (or later) EV ELITe_STD, Assay Protocol with parameters for Calibrators analysis.	ENTEROVIRUS ELITe MGB Kit (EG SpA, ref. RTS076PLD) ELITe InGenius and ELITe BeGenius Consumables (see E
ELITe BeGenius (EG SpA, ref. INT040) ELITe BeGenius Software version 2.3.0 (or later) EV ELITe_Be _STD, Assay Protocol with parameters for Calibrators analysis.	InGenius and ELITe BeGenius Instruction for Use)

## 6 WARNINGS AND PRECAUTIONS

This product is designed for in-vitro use only.

#### 6.1 General warnings and precautions

- Handle and dispose of all reagents and all materials used to carry out the assay as if they were infectious.
   Avoid direct contact with the reagents. Avoid splashing or spraying. Waste must be handled and disposed of in
   compliance with adequate safety standards. Disposable combustible material must be incinerated. Liquid
   waste containing acids or bases must be neutralized before disposal.
- Wear suitable protective clothes and gloves and protect eyes and face.
- · Never pipette solutions by mouth.
- Do not eat, drink, smoke or apply cosmetic products in the work areas.
- · Carefully wash hands after handling samples and reagents.
- Dispose of leftover reagents and waste in compliance with the regulations in force.
- Carefully read all the instructions provided before running the assay.
- · While running the assay, follow the product instructions provided.
- · Do not use the product after the indicated expiry date.
- · Only use the reagents provided with the product and those recommended by the manufacturer.
- · Do not use reagents from different batches.
- · Do not use reagents from other manufacturers.

#### 6.2 Warnings and precautions for molecular biology

- Molecular biology procedures require qualified and trained staff to avoid the risk of erroneous results, especially due to sample nucleic acids degradation or sample contamination by PCR products.
- · Laboratory coats, gloves and tools dedicated to work session setup are needed.
- The PCR Cassette must be handled carefully and never opened to prevent PCR product diffusion and carryover contamination.

#### 6.3 Warnings and precautions specific for the components

#### Table 3

Component	Storage temperature	Use from first opening	Freeze / thaw cycles	On board stability (ELITe InGenius and ELITe BeGenius)
EV Q — PCR Standard	-20°C or below	one month	up to four	up to four separate sessions* of two hours each

<sup>\*</sup> with intermediate freezing.

## 7 PROCEDURE

The product **ENTEROVIRUS ELITe Standard** must be used in association with the complete reaction mixture of the product **ENTEROVIRUS ELITe MGB Kit**.

The components EV Q - PCR Standard are ready to use: a volume of 10  $\mu$ L each is directly added to the complete reaction mixture (EV PCR Mix and RT-EnzymeMix, components of ENTEROVIRUS ELITE MGB Kit) by the instrument.

Before use, take and thaw the **EV Q - PCR Standard** tubes at room temperature (+16 / +26°C) for 30 minutes. Mix gently, spin down the content for 5 seconds and keep them on ice or in a cool block.

The complete assay procedure is described in detail in the instructions for use of the product **ENTEROVIRUS ELITE MGB Kit**.

The performance characteristics and procedure limitations of the complete assay are described in detail in the instructions for use of the product **ENTEROVIRUS ELITE MGB Kit**.

#### NOTE

The results of the **EV Q - PCR Standard** will be stored by the ELITe InGenius and ELITe BeGenius instruments and used to calculate the calibration curve. For each lot of **ENTEROVIRUS ELITE MGB Kit**, the calibration curve is required. The stored results of the Q - PCR Standard amplification will expire after **60 days**.

## 8 REFERENCES

W. A. Verstrepen et al. (2001) J Clin Microbiology 39: 4093 - 4096

E. A. Lukhtanov et al. (2007) Nucleic Acids Res. 35: e30

C. N. Kotton et al. (2024) Transplantation 00: 00 - 00

## 9 SYMBOLS

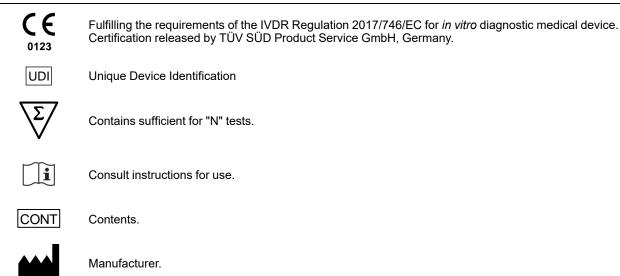
REF Catalogue Number.

Upper limit of temperature.

LOT Batch code.

Use by (last day of month).

IVD in vitro diagnostic medical device.



## 10 NOTICE TO THE USERS

Any serious incident that has occurred in relation to the device shall be reported to the manufacturer and the competent authority of the Member State in which the user and /or the patient is established. To inform ELITechGroup S. p. A., manufacturer of this device, please use the following mail address: egspa. vigilance@elitechgroup.com..

A "Summary of Safety and Performance" will be made available to the public via the European database on medical devices (Eudamed) when this informatic system will be functional. Before the notice of full functionality of Eudamed has been published, the "Summary of Safety and Performance" will be made available to the public upon request by email at emd.support@elitechgroup.com, without undue delay.

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