

CATALOGUE

2025



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HEPATITIS





48 tests

The kit allows the **genotyping of Hepatitis Virus C** (HCV) RNA, through Real Time RT-PCR.

<u>Target regions:</u> 5'UTR, Core and NS5B of viral RNA. <u>Genotypes and subtypes:</u> 1 or 6c-v, 2, 3, 4, 5, 1a, 1b and 6a/b.

NEW GEN-C 3.0Ref.AC004/24

The kit allows the **genotyping of the most common genotypes and subtypes of Hepatitis Virus C** (HCV), through Reverse Dot Blot (RDB) hybridization strip assay.

Genotypes: 1, 2, 3, 4, 5, 6 and 7.

<u>Subtypes:</u> 1a, 1b, 2a/2c, 2b, 3a, 3b, 3c, 3k, 4a, 4b, 4c/4d, 4e, 4f, 4h,

5a, 6a/6b, 6g, 6m, 6t and 7a.



24 tests

The kit allows the **quantification of Hepatitis Virus D** (HDV) RNA in human plasma.

Target region: gene coding DAg of viral RNA.

For Research Use Only (RUO). Not for use in diagnostic procedures.





HERPES VIRUSES



48 tests

The kit allows the qualitative and quantitative identification of cytomegalovirus (CMV) DNA.

<u>Target region:</u> MIEA gene (major immediate early antigen, HCMVUL123) of viral DNA. <u>Calibration curve:</u> *ref.GA028/2*

EBV Real Time Ref.AA1572/48

48 tests

The kit allows the qualitative and quantitative identification of Epstein Barr Virus (EBV) DNA.

<u>Target region:</u> EBNA1 gene (Epstein-Barr nuclear antigen 1) of viral DNA.

Calibration curve: ref.GA031/2

HSV-1 Real Time Ref.AA1582/24

24 tests

The kit allows the **qualitative and quantitative identification of human Herpes Simplex Virus 1** (HSV-1) DNA.

<u>Target region:</u> gpD gene (glycoprotein D) of viral DNA. <u>Calibration curve:</u> *ref.GA032/4*

HSV-2 Real Time Ref.AA1583/24

24 tests

The kit allows the **qualitative and quantitative identification of human Herpes Simplex Virus 2** (HSV-2) DNA.

<u>Target region:</u> gpD gene (glycoprotein D) of viral DNA. <u>Calibration curve:</u> *ref.GA033/4*

HHV-6 Real Time Ref.AA1584/24

24 tests

The kit allows the **qualitative and quantitative identification of Human Herpes simplex Virus 6** (HHV-6) DNA.

<u>Target region:</u> U70 gene of viral DNA. <u>Calibration curve:</u> *ref.GA034/4*

VZV Real Time Ref.AA1585/24

24 tests

The kit allows the **qualitative and quantitative identification of Varicella Zoster Virus** (VZV) DNA.

<u>Target region:</u> Major DNA binding protein gene (ORF29) of viral DNA. <u>Calibration curve:</u> *ref.GA035/4*



OTHERS



Enterovirus Real Time

Ref.AA1587/24

24 tests

The kit allows the qualitative and quantitative identification of Enterovirus RNA.

Target region: 5'UTR of viral RNA. Calibration curve: ref.GA037/4

Chlamydia trachomatis Real Time 2.0

Ref.AA842/50

The kit allows the qualitative identification of Chlamydia trachomatis (CT) DNA.

Target regions: 16S rRNA gene and cryptic plasmid of bacterial DNA.

HPV 14 Genotypes Quantitative

Ref.AA1335/100

100 tests

The kit allows the quantitative and qualitative detection and genotyping of 14 high risk genotypes of Human Papillomavirus (HPV).

Genotypes: 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66 and 68.





COAGULATION FACTORS

Real Time

CVD-6 Multiplex **Real Time**

Ref.AA1397/48

48 tests

The kit allows the **identification of 6 different mutations** and polymorphisms involved in arterial and venous thrombosis, through melting curve analysis.

The workflow can be automated with **Omnia system**. Targets: Factor V G1691A, Factor V H1299R, Factor II G20210A,

MTHFR C677T, MTHFR A1298C, PAI-1 4G/5G.

Factor II (G20210A) Real Time (FRET)

Ref.AA831/50A AA831

50 tests

The kit allows the identification of the **G20210A mutation** in Factor II or prothrombin, through melting curve analysis. The workflow can be automated with **Omnia system**.

Factor V (G1691A) Real Time (FRET)

Ref.AA832/50A AA832

50 tests

The kit allows the identification of the **Factor V Leiden**, **caused by** the mutation G1691A (R506Q) in Factor V, through melting curve

The workflow can be automated with **Omnia system**.

MTHFR (C677T)Real Time (FRET)

Ref.AA901/25A AA901

25 tests

The kit allows the identification of the C677T mutation in MTHFR gene (methylenetetrahydrofolate reductase), through melting curve analysis.

The workflow can be automated with **Omnia system**.

MTHFR (A1298C) Real Time (FRET)

Ref.AA902/25A AA902

25 tests

The kit allows the identification of the A1298C mutation in MTHFR gene (methylenetetrahydrofolate reductase), through melting curve analysis.

The workflow can be automated with **Omnia system**.

PAI 1 (4G/5G) Real Time (FRET)

Ref.AA1034/25A AA1034

25 tests

The kit allows the genotyping of the **4G/5G polymorphism** in the gene that encodes for the protein Plasminogen Activator Inhibitor-1 (PAI-1), through melting curve analysis.

The workflow can be automated with **Omnia system**.

Factor V

50 tests

(H1299R) **Real Time** (FRET) Ref.AA933

The kit allows the identification of the H1299R mutation in Factor V (HR2), through melting curve analysis.

The aplotype HR2 leads to an increased risk of thrombosis when in association with FV Leiden.

COAGULATION FACTORS

Reverse Dot Blot (RDB)



20 tests

The kit allows the **identification of the main mutations and polymorphisms** involved in arterial and venous thrombosis and in lipid metabolism, through Reverse Dot Blot (RDB) hybridization strip assay.

Targets: Factor V R506Q and H1299R, Factor II G20210A, MTHFR C677T and A1298C, CBS 844ins68, PAI-1, GPIIIa HPA-1 a/b, ACE, AGT, ATR-1, β-fibrinogen and Factor XIII, ApoE.

Screening test for thrombophilic disease 7 mutations

Ref.AC034

25 tests

The kit allows the **identification of 7 mutations** involved in thrombophilic diseases, through Reverse Dot Blot (RDB) hybridization strip assay.

Targets: Factor V G1691A, Factor V H1299R, Factor V Y1702C, Factor II G20210A, MTHFR C677T, MTHFR A1298C and PAI 1 4G/5G.

Screening test for thrombophilic disease 3 mutations

Ref.AC082

25 tests

The kit allows the **identification of 3 mutations** involved in thrombophilic diseases, through Reverse Dot Blot (RDB) hybridization strip assay.

Targets: Factor V G1691A, Factor II G20210A and MTHFR C677T.

HEMOGLOBINOPATHIES

Reverse Dot Blot (RDB)

Alpha Globin test

Ref.AC099

10 tests

The kit allows the identification of **22 alterations in the alpha-globin gene** involved in alpha-talassemia, through Reverse Dot Blot (RDB) hybridization strip assay.

Beta Globin test

Ref.AC091

20 tests

The kit allows the identification of **25 alterations in the beta-globin gene** involved in beta-talassemia, through Reverse Dot
Blot (RDB) hybridization strip assay.

Beta Globin Plus test

Ref.AC104

20 tests

The kit allows the identification of the **triplicate of the gene alpha-globin (anti 3.7) and of 14 mutations and deletions of the beta-globin gene**, through Reverse Dot Blot (RDB) hybridization strip assay.





CYSTIC FIBROSIS

Fragment Analysis

CF Fast Ref.AA1358/48A

48 tests

The kit allows the identification of **40 mutations and 5T(TG9-13)-7T-9T allele** of the gene that encodes for CFTR protein, through **fragment analysis** on an automatic sequencer.
The workflow can be automated with **Omnia system**.

CF Fast Plus Ref.AA1413/48A The kit allows the identification of **43 mutations** of the gene that encodes for CFTR protein, through **fragment analysis** on an automatic sequencer.

The workflow can be automated with **Omnia system**.

CYSTIC FIBROSIS

Reverse Dot Blot (RDB)

Cystic Fibrosis Ref.AC023/25 The kit allows the identification of **38 mutations** of the gene that encodes for CFTR protein, through Reverse Dot Blot (RDB) hybridization strip assay.

CF Plus Ref.AC089 The kit allows the identification of **22 mutations** of the gene that encodes for CFTR protein, through Reverse Dot Blot (RDB) hybridization strip assay.

The assay is an extension of ref. ACO23/25.

CF Del Ref.AC033

The kit allows the identification of **7 macrodeletions** of the gene that encodes for CFTR protein, through Reverse Dot Blot (RDB) hybridization strip assay.

The assay is an extension of *ref.AC023/25*.

HEMOCHROMATOSIS

Real Time



50 tests

The kit allows the identification of **H63D**, **S65C** and **C282Y** mutations in **HFE gene**, through melting curve analysis. The workflow can be automated with **Omnia system**.

Hemochromatosis HFE H63D HFE S65C Real Time (FRET)

Ref.AA978 25 tests The kit allows the identification of **H63D and S65C mutations** in **HFE gene**, through melting curve analysis.

Hemochromatosis HFE C282Y Real Time (FRET)

Ref.AA979

50 tests

The kit allows the identification of **C282Y mutation in HFE gene**, through melting curve analysis.

HEMOCHROMATOSIS

Reverse Dot Blot (RDB)

Hemochromatosis 15 mutations

Ref.AC066

25 test

The kit allows the identification of **15 polymorphisms in the HFE, TFR2 and FPN1 genes**, through Reverse Dot Blot (RDB) hybridization strip assay.

Targets HFE gene: V53M, V59M, H63H, H63D, S65C, C282Y, Q283P,

E168Q, E168X and W169X.

<u>Targets TRF2 gene:</u> E60X, M172K and Y250X. <u>Targets FPN1 gene:</u> N144H and V162del.

HFE 3 mutazions

Ref.AC062

25 tests

The kit allows the identification of **H63D**, **S65C** and **C282Y** mutations in **HFE gene**, through Reverse Dot Blot (RDB) hybridization strip assay.





PHARMACOGENETICS

Real Time

DPYD Real Time (FRET)

Ref.AA1579/48A

48 tests

The kit allows the identification of 5 mutations in DPYD gene associated to clinically relevant adverse event to the chemioterapic agent fluoropyrimidine, used for the treatment of different solid tumors. The workflow can be automated with **Omnia system**. Targets: c.1905+1G>A, c.1679T>G, c.1129-5923C>G, c.2846A>T and c.2194G>A.

UGT1A1 **Real Time** (FRET) Ref.AA1628/24A

24 tests

The kit allows the identification of 4 allelic variants of UGT1A1 gene, associated to severe toxicity during the administration of irinotecan, an anti-tumoral drug.

In addition, the same variants are associated to altered metabolism of bilirubin in Gilbert's syndrome.

The workflow can be automated with **Omnia system**. Targets: *1, *28, *36 and *37.

CELIAC DISEASE Reverse Dot Blot (RDB)

CeLia-Type Strip Assay Ref.AC083

25 tests

The kit allows the identification of the **predisposing haplotypes to** Celiac Disease, through Reverse Dot Blot (RDB) hybridization strip assay.

OTHERS

ApoE Real Time (FRET) Ref.AA1524/25A

25 tests

The kit allows the identification of the **three isoforms of the protein ApoE** (ApoE2, ApoE3 e ApoE4) through the analysis of T334C (rs429358) and C472T (rs7412) polymorphisms. The workflow can be automated with **Omnia system**.

CBS Genotype Ref.AA1037

20 tests

The kit allows the identification of an insertion in exon 8 (844ins68) in the gene that encodes for the protein Cystathionine beta synthase (**CBS**), whose presence is associated to Hyperhomocysteinemia.

OMNIA SYSTEMS





Compact workstation for **nucleic acid extraction** and **PCR setup**, created to meet the automation requirements of the molecular biology laboratory.

More than 20 protocols for genetic tests are already available!

<u>Application field:</u> pharmacogenetics, celiac disease, cystic fibrosis, coagulation factors and cardiovascular risk, hemoglobinopathies, HLA and hemochromatosis.

Name	Ref.	Samples
OMNIA LH 75 PRO	CA219	From 1 to 48
OMNIA LH 75	CA190	Up to 24

EXTRACTIONS

DNA extraction from blood

Ref.AA1319/48 AA1319/96

48 or 96 tests

The extraction kit, **in combination with Omnia system**, allows the extraction of genomic DNA from blood.

This is a fully automated extraction system which uses ready-to-use reagents.

DNA extraction (column)

Ref.AA1001

25 tests

The extraction kit allows the **manual column-based DNA extraction** from whole blood, cell culture, serum, plasma or other body fluids.

The obtained DNA is ready to use for subsequent reactions like PCR, Southern blotting or any kind of enzymatic reaction.



GENERAL TERMS AND CONDITIONS OF SALE

DEFINITIONS

For the purposes of these general terms and conditions of sale, and in addition to the other definitions contained herein, the following terms shall have the meaning set out below.

- a) "General Conditions": are all the conditions of sale, applicable to the contractual relationship between NUCLEAR LASER MEDICINE S.r.l. and the Customer.
- b) NUCLEAR LASER MEDICINE S.r.l. or "Supplier/Seller": supplier of goods and services.
- c) "Customer": the purchaser of the products or services, meaning the natural or legal person who makes the purchase.
- d) "Products": all products and/or goods and/or services marketed by NUCLEAR LASER MEDICINE S.r.l.

1. INTRODUCTION

- a) These General Terms and Conditions of Use and Sale (hereinafter referred to as the "General Conditions") exclusively govern the contractual relations between the Supplier/Seller and the Customer. These General Conditions are the only ones that can be applied and replace all other conditions, except for prior, express and written exceptions.
- Any special conditions and/or exceptions or modifications to these general terms and conditions must in any case be specifically.
- c) Any agreements, minutes, declarations or commitments of agents, employees and officers of the Supplier/Seller made before, at the same time or after the signing of these conditions will not be binding on Nuclear Laser Medicine S.r.l. unless confirmed by the latter in writing.

2. ACCEPTANCE OF THE GENERAL TERMS AND CONDITIONS OF SALE

By placing an order in the various ways provided, the Customer declares that he/she has read all the information provided to him/her during the purchase procedure and that he/she fully accepts the General and Payment Conditions described below.

3. METHODS OF PURCHASE AND PAYMENT

- a) Orders can be placed by the Client by e-mail to <u>sgaramella</u>. mkt@nlm.it
- b) Payment may be made by pre-payment.

5. DURATION OF THE CONTRACT

The duration of the contract is indicated in the offer.

6. OBLIGATIONS OF THE PURCHASER

The Client is strictly forbidden to provide false and/or invented and/or fictional data in the registration procedure necessary to activate the process for the execution of this sales agreement and the related further communications; Personal data and e-mails must be exclusively your own personal data and not those of third parties. In this case, the Supplier/Seller will be free from any contractual obligation.

7. PRICES

- a) Prices are in Euro.
- b) Shipping cost are not included in the prices
- If requested, the Supplier/Seller can add the shipping costs to the invoice.

8. DELIVERY OF PRODUCTS

- a) The methods and times of delivery of the products are specified in the proforma invoice.
- b) The goods will be delivered to the address indicated by the Customer.
- c) The Supplier/Seller reserves the right to make multiple shipments, even for a single order, based on stock availability,

prior notice to the customer.

d) Shipping cost are at charge to the Customer.

9. CLAIMS

Any complaints will be accepted within 48 hours of receipt of the goods

10. RIGHT OF WITHDRAWAL

The Supplier/Seller will have the right to terminate the relationship at any time, notifying the other party by email.

11. PRIVACY

- a) The Supplier/Seller guarantees the Customer compliance with the legislation on the processing of personal data, as governed by EU Regulation 679/2016 and the Code regarding the protection of personal data referred to in Legislative Decree no. 196/03 (as amended by Legislative Decree 101/2018).
- b) The information requested by the Supplier/Seller from the Client is essential for the processing and validation of orders, as well as for the issuance of invoices. Failure to do so will result in the automatic cancellation of the order.
- c) The processing of data has the purposes directly connected and instrumental to the fulfilment of the order sent by the Customer.

12. FORCE MAJEURE

- a) The Supplier/Seller shall not be held liable to the Client for delays or non-performance of contractual obligations caused, directly or indirectly, by force majeure beyond its control, such as: natural phenomena of particular intensity, war, strikes, unforeseen reactions ordered by the authorities, etc. In such cases, the Affected Party shall notify the Supplier/Seller of the event in a timely manner.
- b) In any case of force majeure, the Supplier/Seller shall be entitled to cancel the contract or request its execution within a period to be set. Of course, in the latter case, the deadlines for the fulfilment of the contract will be extended for a period corresponding to the suspension.

13. LIMITATIONS OF LIABILITY

- a) The Supplier/Seller assumes no responsibility for inefficiencies attributable to force majeure, such as attributable to p.to 14, which prevent, in whole or in part, the execution of the sales agreement within the agreed timeframe.
- b) The Supplier/Seller shall not be liable to any party, including third parties, for damages, losses and costs incurred as a result of the non-performance of the sales agreement for the above-mentioned causes, or with regard to damages, losses and costs suffered as a result of the use or inability to use the products purchased, the Customer being only entitled to a refund of the price paid, excluding any shipping costs.
- c) The Supplier/Seller shall not be held liable for delays in the execution of the purchase order or for the non-execution of the same, if such situations are caused by impediments beyond its control, which the Supplier/Seller could not reasonably foresee and the consequences of which could not have been avoided or limited.
- d) The goods travel at the Customer's own risk. The Supplier/ Seller is relieved of any liability for any damage caused to the goods during transport.

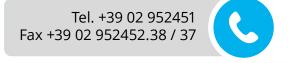
14. JURISDICTION AND APPLICABLE LAW

The supply contract between the Supplier/Seller and the Customer is intended to be concluded in Italy and governed by Italian law. For the resolution of civil and criminal disputes arising from the conclusion of this contract, the jurisdiction is exclusively that of the Court of Milan.



Nuclear Laser Medicine srl







RECEPTION segreteria@nlm.it

CUSTOMER CARE <u>customercare@nlm.it</u>

MARKETING marketing@nlm.it



