



Nuclear Laser Medicine srl
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Nuclear Laser Medicine

Diagnostic solutions

CATALOGUE

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HEPATITIS



GEN-C Real Time

Ref.AA1441/48

48 tests

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

Target regions: 5'UTR, Core and NS5B of viral RNA.

Genotypes and subtypes: 1 or 6c-v, 2, 3, 4, 5, 1a, 1b and 6a/b.

HCV RNA Real Time Qualitative 2.0

Ref.AA896/24

24 tests

The kit allows the **qualitative determination of Hepatitis Virus C (HCV) RNA**. The amplified products are compatible with *GEN-C 2.0 (ref. AC004/24)* for HCV genotyping.

Target regions: 5'UTR and Core of viral RNA.

GEN-C 2.0

Ref.AC004/24

24 tests

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. The kit is compatible with the amplified products obtained with *ref.AA896/24*.

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

Subtypes: 1a, 1b, 2a/2c, 2b, 3a, 3b, 3c, 3k, 4a, 4b, 4c/4d, 4e, 4f, 4h, 5a, 6a/6b, 6g, 6m, 6t and 7a.

HCV RNA Real Time Quantitative 3.0

Ref.AA910/48

48 tests

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

Target region: 5'UTR of viral RNA.

Calibration curve: *ref.GA029/2*

HBV DNA Real Time Quantitative 2.0

Ref.AA206/48

48 tests

The kit allows the **quantification of Hepatitis Virus B (HBV) DNA** in human plasma.

Target region: HBsAg of viral DNA.

Calibration curve: *ref.GA030/2*

HDV Real-TM Quant

Ref.AA1188/120

120 tests

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

Target region: gene coding DA_g of viral RNA.

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

HERPES VIRUSES

**CMV
Real Time**

Ref.AA1489/48

48 tests

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

Target region: MIEA gene (major immediate early antigen, HCMVUL123) of viral DNA.

Calibration curve: *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**.

Target region: 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**.

Target region: gpD gene (glycoprotein D) of viral DNA.

Calibration curve: *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**.

Target region: gpD gene (glycoprotein D) of viral DNA.

Calibration curve: *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**.

Target region: U70 gene of viral DNA.

Calibration curve: *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**.

Target region: Major DNA binding protein gene (ORF29) of viral DNA.

Calibration curve: *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

50 tests

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.

SARS-CoV-2 Real Time

Ref.AA1571/96S
AA1571/960S

96 or 960 tests

The kit allows the **qualitative identification of SARS-CoV-2 virus RNA**.

Target regions: Orf1ab, E and N of viral RNA.

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 analysis.

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 (H1299R) Real Time (FRET)

Ref.AA933

50 tests

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)

CVD-14
Ref.AC084

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-thalassemia, 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-thalassemia, 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

48 tests

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

25 tests

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

25 tests

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.AC023/25*.

CF Del

Ref.AC033

25 tests

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



Hemochromatosis H63D - C282Y - S65C Real Time (FRET)

Ref.AA1493/50A
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 tests

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.

Targets TRF2 gene: E60X, M172K and Y250X.

Targets FPN1 gene: N144H and V162del.

HFE 3 mutations

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!

Application field: 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.



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