

## 2.1 Oncogene Expression Quantification / Minimal Residual Disease (MRD)

Order number	Product name	Intended use	Legal Status	Tests/Size
<b>Reference Gene Transcripts/ "Housekeeping Genes"</b>				
BA164	18S rRNA PCR Kit	Real-time PCR Kit for <i>in vitro</i> quantification of 18S rRNA transcripts	RUO	120
BA162	c-ABL PCR Kit	Real-time PCR Kit for <i>in vitro</i> quantification of c-ABL transcripts	RUO	120
BA163	GAPDH PCR Kit	Real-time PCR Kit for <i>in vitro</i> quantification of GAPDH transcripts	RUO	120
BA464	p53 PCR Kit	Real-time PCR test for <i>in vitro</i> quantification of p53 cDNA	RUO	120

## 2.2 Somatic Mutations with Therapeutic Implications in Various Cancers

Order number	Product name	Intended use	Legal Status	Tests/Size
BA165	ABL Mutation Detection PCR Kit	Real-time PCR test for <i>in vitro</i> detection of the T315I (944C>T) somatic mutation in the ABL oncogene in CML patients with secondary resistance to Imatinib (Gleevec)	RUO	24, 50
BA166	BRAF Mutation PCR Kit I	Real time PCR test for the identification of the V600E mutation in the BRAF gene by sequence specific primer (SSP) PCR	CE	12, 24, 36, 48, 60, 96
BA465	BRAF Mutation PCR Kit II	Real time PCR test for the identification of the BRAF Codon Specific Mutations in Codon 600	CE	10, 30, 60
BA171	CALR Mutation PCR Kit	PCR test for detection of type 1 and type 2 mutations in exon 9 of the calreticulin (CALR) gene (agarose gel detection!!)	CE	50
BA167	CC-MSI PCR Kit	Test for the analysis of microsatellite instability in colon-rectal cancer by multiplex amplification with fluorescent primers and subsequent fragment analysis by automatic DNA sequencing	CE	24, 48
BA466	c-KIT Mutation PCR Kit	Real-time qualitative PCR assay for the detection of somatic mutations in Codon 861 of Exon 17 in the c-KIT proto-oncogene in genomic DNA from human cells or tissues	RUO	10, 30, 60
BA168	EGFR Mutation PCR Kit I	Real time PCR test for the identification of the EGFR gene L858R & del 746-750 mutations	CE	12, 24, 36
BA467	EGFR Mutation PCR Kit II	Real time PCR test for the identification of the EGFR Codon Specific Mutation in Codons 719, Ex19Del, 790, 858 & 861	CE	10, 30, 60
BA468	HRAS Mutation PCR Kit	Real-time qualitative PCR test for the detection of mutations in codon 61 of the human HRAS gene	RUO	10, 30, 60
BA172	JAK-2 Mutation PCR Kit	Real time PCR test for the identification and/or absolute quantification of codon 617 specific mutations in the Janus Kinase 2 (JAK-2) gene	CE	10, 30, 48, 60, 96
BA169	KRAS Mutation PCR Kit I	Real time PCR test for the identification of the seven most frequent mutations in the KRAS gene (G12D, G12V, G12A, G12C, G12S, G12R, G13D) by sequence specific primer (SSP) PCR	CE	12, 24, 36, 48, 60, 96
BA469	KRAS Mutation PCR Kit II	Real time PCR test for the identification of the KRAS Codon Specific Mutations in Codons 12, 13, 59, 61, 117 & 146	CE	10, 30, 60
BA170	NRAS Mutation PCR Kit	Real time PCR test for the identification of the NRAS gene 35G>T (G12V) mutation in codon 12	CE	12, 24, 60
BA470	PIK3CA Mutation PCR Kit	Real-time qualitative PCR test for the detection of somatic mutations in and near PIK3CA Codons 542 and 545 in Exon 9 and Codon 1047 in Exon 20 in the human PIK3CA gene	CE	10, 30, 60

## 3. HUMAN GENETIC DISEASES AND GENETIC PREDISPOSITIONS

### 3.1 Thrombophilia

Order number	Product name	Intended use	Legal Status	Tests/Size
BA182	ACE (I/D) PCR Kit	Real Time PCR test for the identification and genotyping of the insertion/deletion (I/D) polymorphism located on intron 16 of the human gene coding for angiotensin converter enzyme (ACE)	CE	48, 50, 96
BA174	Cardio Thrombophilia Panel PCR Kit	Real Time PCR test for detection of 8 mutations: F2 20210 G>A, F5 1691 G>A (Arg506Gln), F710976 G>A (Arg353Gln), F13 G>T (Val34Leu), FGB -455 G>A, ITGA2 807 C>T (Phe224Phe), ITGB3 1565 T>C (Leu33Pro), SERPINE1 (PAI1) -675 5G>4G	RUO	48
BA602	Factor II PCR Kit	Real-time PCR test for the identification and genotyping of the G20210A mutation in the human gene coding for Coagulation Factor II	CE	48, 50, 60, 96
BA176	Factor V Leiden PCR Kit	Real-time PCR test for identification and genotyping of either the G1691A (Leiden) or Y1702C mutation in the human gene coding for Coagulation Factor V	CE	12, 48, 50, 60, 96, 100

### 3.1 Thrombophilia

Order number	Product name	Intended use	Legal Status	Tests/Size
BA177	Factor VII PCR Kit	Real-time PCR test for identification and genotyping of the G1238A (R353Q) mutation in the human gene coding for Coagulation Factor VII	RUO	50, 60, 96
BA178	Factor VIII PCR Kit	Real-time PCR test for the identification and genotyping of the G100T (Val34Leu) polymorphism in Factor VIII gene from blood samples	CE	25, 50, 100
BA179	Factor XII PCR Kit	Real-time PCR test for the identification and genotyping of the C4T (rs1801020) polymorphism in Factor XII gene from blood samples	RUO	60, 96
BA180	Factor XIII PCR Kit	Real-time PCR test for the identification and genotyping of the G103T (Val35Leu; rs5985) polymorphism in Factor XIII A1 gene from blood samples	RUO	60, 96
BA183	FGB PCR Kit	Real Time PCR test for detection of fibrinogen beta gene polymorphism G455A (rs1800790)	RUO	60, 96
BA181	Folates Metabolism Panel PCR Kit	Real Time PCR test for detection of 4 polymorphisms: MTHFR 677 C>T (Ala222Val), MTHFR 1298A>C (Glu429Ala), MTR 2756 A>G (Asp3919Gly), MTRR 66 A>G (Ile22Met)	RUO	12, 48, 60
BA184	GPIBA1b PCR Kit	Real Time PCR test for detection of platelet glycoprotein Iba gene polymorphisms C482T (Thr145 Met; rs6065) or T5C (Kozak sequence polymorphism; rs2243093)	RUO	60, 96
BA185	ITGA2 PCR Kit	Real Time PCR test for detection of Integrin alpha2 gene polymorphism T176C (rs1126643)	RUO	60, 96
BA186	ITGB3 PCR Kit	Real Time PCR test for detection of Integrin alpha2 gene polymorphism T176C (Leu33Pro; rs5918)	RUO	60, 96
BA187	MTHFR PCR Kit	Real Time PCR test for the identification and genotyping of either the C677T or A1298C polymorphism in the human gene coding for MTHFR	CE	25, 48, 50, 96, 100
BA188	MTR PCR Kit	Real Time PCR test for detection of methionine synthase gene mutation A2756G (Asp919Gly; rs1805087)	RUO	60, 96
BA189	MTRR PCR Kit	Real Time PCR test for detection of A66G methionine synthase gene polymorphism (Ile22Met; rs1801394)	RUO	60, 96
BA190	PAI-1/Serpin PCR Kit	Real Time PCR test for the identification and genotyping of the 675 4G/5G insertion/deletion polymorphism in the human gene coding for SERPINE1 or plasminogen activator type 1 inhibitor gene (rs1799768)	CE	25, 48, 50, 96
BA191	SELPLG PCR Kit	Real Time PCR test for detection of selectin P ligand gene polymorphism G186A (Met62Ile; rs2228315)	RUO	60, 96
BA192	β-Fibrinogen (G455A) PCR Kit	Real Time PCR test for the allelic discrimination of polymorphisms G455A in β-Fibrinogen gene from blood	CE	50

### 3.2 Cardiovascular Disease

Order number	Product name	Intended use	Legal Status	Tests/Size
<b>Hypertension</b>				
BA193	AGT 1 PCR Kit	Real Time PCR test for detection of Angiotensinogen 1 polymorphism C521T (Thr207Met, rs4762)	RUO	60, 96
BA194	AGT 2 PCR Kit	Real Time PCR test for detection of Angiotensinogen 2 polymorphism C4072T (Met235Thr, rs699)	RUO	60, 96
BA195	AGTR1 PCR Kit	Real Time PCR test for detection of angiotensin II receptor, type 1 polymorphism A1166C (rs5186)	RUO	60, 96
BA196	Cardio Hypertension Panel PCR Kit	Real Time PCR test for detection of 8 mutations: ADD1 1378 G>T (Gly460Trp), AGT 704 T>C (Met235Thr), AGT 521 C>T (Thr174Met), AGTR1 1166 A>C, AGTR2 1675 G>A, CYP11B2 -344 C>T, GNB3 825 C>T, NOS3 -786 T>C, NOS3 894 G>C (Glu298Asp)	RUO	48
BA471	CVD Panel PCR Kit	Amplification/Reverse hybridization assay for detection of mutation FV:Q506 in factor V gen, of polymorphism 20210A in factor II gen, the MTHFR risk alleles for coronary disease, and the risk markers of PAI-1 gen in cardiovascular disease (CVD)	RUO	12, 60
BA472	Coagulation panel PCR Kit	Real Time PCR test for detection of coagulation factors FII G20 210A, FV G1691A and Y1702C and MTHFR C677T and A1298C mutations	CE	50
BA198	NOS3 PCR Kit	Real Time PCR test for detection of Nitric oxide synthase 3 polymorphism C786T (rs2070744)	RUO	60, 96

### 3.2 Cardiovascular Disease

Order number	Product name	Intended use	Legal Status	Tests/Size
<b>Myocardial Infarction &amp; Ischemic Stroke</b>				
BA199	AGT1 PCR Kit	Real Time PCR test for detection of <i>Angiotensinogen 1</i> polymorphism C521T (Thr207Met, rs4762)	RUO	60, 96
BA200	ApoB PCR Kit	Real Time PCR test for the allelic discrimination of polymorphisms R3500Q in <i>Apo B</i> gene from blood	CE	50
BA201	ApoE PCR Kit 1	Real Time PCR test for detection of <i>apolipoprotein E</i> polymorphism T3100C (Leu48Pro, rs769452)	RUO	60, 96
BA202	ApoE PCR Kit 2	Real Time PCR test for the allelic discrimination of polymorphisms T334C (C112R) and C472T (R158C) in <i>apolipoprotein E</i> gene from blood	CE	50
BA203	GP IIb/IIIa PCR Kit	Real Time PCR test for the allelic discrimination of polymorphism T1565C in <i>GPIIb</i> gene (ITGB3, most abundant receptor on platelet surface) from blood	CE	50
BA204	GP1BA1b PCR Kit	Real Time PCR test for detection of the <i>Platelet glycoprotein Iba</i> polymorphism C482T (Thr161Met, rs6065) or T5C (rs2243093)	RUO	60, 96
BA205	ITGA2 PCR Kit	Real Time PCR test for detection of <i>integrin alpha 2</i> polymorphism Ø807T (Phe253Phe, rs1126643)	RUO	60, 96

### Lipid Metabolism

BA206	ApoB PCR Kit	Real Time PCR test for the allelic discrimination of polymorphisms R3500Q in <i>Apo B</i> gene from blood	CE	50
BA207	ApoE PCR Kit 1	Real Time PCR test for detection of <i>apolipoprotein E</i> polymorphism T3100C (Leu48Pro, rs769452)	RUO	60, 96
BA208	ApoE PCR Kit 2	Real Time PCR test for the allelic discrimination of polymorphisms T334C (C112R) and C472T (R158C) in <i>apolipoprotein E</i> gene from blood	CE	50
BA209	LIPC PCR Kit	Real Time PCR test for detection of <i>paraoxonase 1</i> polymorphism G250A (rs2070895)	RUO	60, 96
BA210	LPL PCR Kit	Real Time PCR test for detection of <i>lipoprotein lipase</i> polymorphism C1421G (Ser447Thr, rs328)	RUO	60, 96
BA211	PON1 PCR Kit	Real Time PCR test for detection of <i>paraoxonase 1</i> polymorphism A575G (Gln192Arg, rs662)	RUO	60, 96

### 3.3 Diabetes and Obesity

Order number	Product name	Intended use	Legal Status	Tests/Size
BA212	ADRB2 PCR Kit	Real Time PCR test for detection of <i>adrenoceptor beta 2</i> , surface gene poly-morphism G46A (Arg16Gly, rs1042713) or C5318G (Gln27Glu, rs1042714)	RUO	60, 96
BA213	ADRB3 PCR Kit	Real Time PCR test for detection of $\beta$ - <i>adrenergic receptor</i> gene polymorphism T190C (Trp64Arg, rs4994)	RUO	60, 96
BA214	FABP2 PCR Kit	Real Time PCR test for detection of <i>Fatty Acid Binding Protein 2</i> gene polymorphism A163G (Ala54Thr, rs1799883)	RUO	60, 96
BA215	FTO PCR Kit	Real Time PCR test for detection of <i>FTO</i> gene polymorphism A23525T (rs9939609)	RUO	60, 96
BA216	PPARG2 PCR Kit	Real Time PCR test for detection of <i>Peroxisome Proliferator-Activated Receptor-Gamma-2</i> polymorphism C34G (Pro12Ala, rs1801282)	RUO	60, 96

### 3.4 Pharmacogenetics

Order number	Product name	Intended use	Legal Status	Tests/Size
<b>Anticoagulants</b>				
BA217	Anticoagulants Genetic Resistance PCR Kit	Real Time PCR test for detection of Anticoagulants Genetic Resistance		25
<b>Warfarin Resistance</b>				
BA218	CYP2C9*3 PCR Kit	Real Time PCR test for detection of <i>CYP2C9</i> gene polymorphism A1075C (Ile359Leu; rs1057910)	RUO	60, 96
BA219	Pharmacogenetics Warfarin Panel PCR Kit	Real Time PCR test for detection of 3 mutations: <i>CYP2C9</i> 430 C>T (Arg144Cys), <i>CYP4F2</i> C>T, (Val433Met), <i>VKORC1</i> -1639 G>A	RUO	20, 48
BA220	VKORC1 PCR Kit	Real Time PCR test for detection of <i>Vitamin K epoxide reductase</i> complex subunit 1 gene polymorphism 1173T (Warfarin sensitivity rs9934438) or G3730A (Warfarin sensitivity rs7294)	RUO	60, 96

### 3.4 Pharmacogenetics

Order number	Product name	Intended use	Legal Status	Tests/Size
<b>Clopidogrel (Plavix) Resistance</b>				
BA221	CYP2C19*2 PCR Kit	Real Time PCR test for detection of cytochrome <i>P450</i> CYP2C19 gene polymorphism G681A (rs4244285) (Poor Metabolizer Allel)	RUO	12, 60, 96
BA222	CYP2C19*3 PCR Kit	Real Time PCR test for detection of CYP2C19 gene polymorphism G636A (rs4986893)	RUO	60, 96
<b>Tacrolimus (FK-506 or Fujimycin) Resistance</b>				
BA223	CYP3A5*3 PCR Kit	Real Time PCR test for detection of CYP3A5 gene polymorphism G6986A (rs776746)	RUO	60, 96
<b>Statins Resistance</b>				
BA224	SLCO1B1 PCR Kit	Real Time PCR test for detection of <i>SLCO1B1</i> gene polymorphism T37041C (Val174Ala; rs4149056)	RUO	60

### 3.5 Genetic Diseases

Order number	Product name	Intended use	Legal Status	Tests/Size
<b>Muscular Dystrophy</b>				
BA225	DDK/G17 PCR Kit	PCR Test for the detection of deletions in the Duchenne and Becker muscular dystrophy gene. Target regions: exons 3, 4, 6, 8, 13, 17, 19, 43, 44, 45, 47, 48, 49, 50, 51, 52, 60	CE	25, 50
<b>Fragile X Syndrome</b>				
BA476	Fragile X Screening PCR Kit	PCR amplification/fluorescent fragment analysis of the FMR1 CGG triplet repeat region (healthy and premutated alleles: 10 to 200 CGG triplet repeats) by capillary electrophoresis in genetic analyzer	CE	16, 48
BA477	Fragile X Confirmatory PCR Kit	PCR amplification/fluorescent detection of mutated alleles of the FMR1 gene for confirmation of normal homozygous female samples and determination of the AGG interruptions by capillary electrophoresis in genetic analyzer	CE	16
<b>Chorea Huntington</b>				
BA478	Huntington disease PCR Kit	PCR amplification/fluorescent determination of the number of CAG repetitions in <i>IT15</i> gene, detection of normal, premutated and mutated alleles by capillary electrophoresis in genetic analyzer	CE	16
<b>Cystic Fibrosis</b>				
BA226	Cystic fibrosis PCR Kit	Deletion & insertion mutation PCR test, reverse dot blot on strip	CE	25
<b>Haemochromatosis</b>				
BA479	Haemochromatosis Panel PCR Kit	Real Time PCR test for detection of up to 3 or the single mutations HFE 187 C>G (H63D) and/or HFE 193 A>T (S65C) and/or HFE 845 G>A (C282Y) in the human HFE gene	CE	12, 24, 25, 48, 50, 60, 96
<b>Osteoporosis</b>				
BA480	Osteoporosis Panel PCR Kit	Amplification/reverse-hybridization assay for simultaneous detection of the most important osteoporosis risk alleles for <i>vitamin D receptor B/b</i> and <i>collagen I alpha 1 S/s</i> allele	CE	12, 60
<b>Thalassemia / FMF</b>				
BA228	Alpha-Globin PCR Kit	Amplification/reverse-hybridization assay for detection of 21 mutations covering >90% of <i>alpha-globin</i> defects found in Mediterranean, Middle Eastern and Southeast Asian countries	CE	10
BA229B	Beta-Globin Plus PCR Test	Amplification/reverse-hybridization assay for the identification of 14 polymorphisms of <i>beta-globin</i> gene and <i>alpha-globin</i> anti 3.7 gene triplication variant	CE	20
BA481	Familial Mediterranean fever (FMF) PCR Kit	Amplification/reverse-hybridization assay for detection of 12 mutations in the <i>MEFV</i> gene: E148Q, P369S, F479L, M680I (G >C, G >A), I692 del, M694V, M694I, K695R, V726A, A744S, R761H	CE	20
BA230	$\beta$ -Globin IME PCR Kit	Amplification/reverse-hybridization assay for detection of 22 mutations covering >90% of <i>beta-globin</i> defects found in the Middle East and India	CE	20
BA229A	$\beta$ -Globin MED PCR Kit	Amplification/reverse-hybridization assay for detection of 22 mutations covering >90% of <i>beta-globin</i> defects found in Mediterranean countries	CE	20
BA231	$\beta$ -Globin SEA PCR Kit	Amplification/reverse-hybridization assay for detection of 22 mutations covering >90% of <i>beta-globin</i> defects found in Southeast Asia	CE	20

### 3.5 Genetic Diseases

Order number	Product name	Intended use	Legal Status	Tests/Size
<b>Aneuploidies</b>				
BA232	TAS PCR Kit	PCR Test for the detection of 13, 18, 21 chromosome trisomy and sexual aneuploidies by multiplex PCR with fluorescent primers and subsequently DNA fragment analysis by automatic sequencer.	CE	25
<b>Lactose Intolerance</b>				
BA233	Lactose Intolerance PCR Kit	Real Time PCR test for Lactose Intolerance detection of the C/T (-13910) polymorphism within the regulatory region of the lactase persistence gene (LCT)	CE	50, 96
<b>Avellino Corneal Disease</b>				
BA481	ACD PCR Kit	Real Time PCR test for the screening of single nucleotide polymorphism of codon124 (exon4) which is coding igh3 gene in Avellino Corneal disease	CE	12, 25, 50, 96, 100
<b>Genetic Polymorphisms Involved in Anti-Viral Treatment</b>				
BA236	IL28B Polymorphism PCR Kit	Real Time PCR tests for detection and genotyping of polymorphisms C->T (rs12979860) or T->G (rs8099917) in the human gene coding for Interleukin 28B which are predictive of response to antiviral treatment	CE	48,96
BA482	IL28B-ITPA PCR Kit	Kit for simultaneous detection and genotyping of polymorphisms in the genes for <i>IL28B</i> and <i>inosine triphosphate pyrophosphatase (ITPA)</i> leading to reduction of hemoglobin during peg-interferon plus ribavirin combination therapy for patients with chronic hepatitis C virus infection by Reverse Line Blot	CE	20
<b>Male Infertility</b>				
BA238	AZF PCR Kit	Multiplex PCR/Strip test for the detection of microdeletions in the azoospermia factor (AZF) of the Y chromosome causing azoospermia and oligospermia. For detection of deletions at AZF locus, target regions: sY84, sY86, DFFRY, DBY, sY95, sY117, sY125, sY127, sY134, sY254, sY255, ZFX/ZFY, SRY. Internal control: ZFX/ZFY	CE	8, 12, 16, 25, 60, 100

## 4. HLA AND BLOOD GROUP TYPING

### 4.1 HLA / HPA Typing

Order number	Product name	Intended use	Legal Status	Tests/Size
BA239	HLA-A PCR Kit	End-point Fluorescence PCR test for detection of HLA-A low resolution, 24 rxn/test	-	10
BA240	HLA-B PCR Kit	End-point Fluorescence PCR test for detection of HLA-B low resolution, 48 rxn/test	-	10, 20
BA241	HLA-C PCR Kit	End-point Fluorescence PCR test for detection of HLA-C low resolution, 24 rxn/test	-	10
BA242	HLA-ABC PCR Kit	End-point Fluorescence PCR test for detection of HLA-ABC low resolution, 96 rxn/test	-	10
BA243	HLA-ABDR PCR Kit	End-point Fluorescence PCR test for detection of HLA-ABDR low resolution, 96 rxn/test	-	10
BA244	HLA-DR PCR Kit	End-point Fluorescence PCR test for detection of HLA-DRB low resolution, 24 rxn/test	-	10
BA245	HLA-DRB1 PCR Kit	End-point Fluorescence PCR test for detection of HLA-DR B1 low resolution, 48 rxn/test	-	10, 20
BA246	HLA-DRDQ PCR Kit	End-point Fluorescence PCR test for detection of HLA-DRB/DQB low resolution, 32 rxn/test	-	10, 30
BA247	HLA-DRDQDP PCR Kit	End-point Fluorescence PCR test for detection of HLA-DRB/DQB low resolution, 88 rxn/test	-	10
BA483	HLA-A29 PCR Kit	Real-Time PCR test for detection of HLA-A*29 group of alleles	-	48
BA484	HLA-B57 PCR Kit	Real Time PCR test for the time HLA-B*57:01 allele screening	-	48, 100
<b>Narcolepsia</b>				
BA485	HLA Narcolepsy PCR Kit	Real-Time PCR test for the detection of HLA-DQB1*06:02 group of alleles	-	48