

# Catalog

## MICROBIOLOGY

**RealBest<sup>®</sup>**

**Diagnosis of infectious disease agents  
by real-time PCR**

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The **RealBest**<sup>®</sup> diagnostic kits are intended for the detection of infectious agents by real-time PCR.

**RealBest kits:**

- Complex approach to PCR diagnostics encompassing sample preparation, PCR and evaluation of results
- Simple nucleic acids extraction using magnetic particles
- Lyophilized Ready Master Mix for the detection of DNA/RNA in real-time
- Compatible PCR and RT-PCR protocols for the detection of a wide range of pathogens
- Noncompetitive Internal Control
- Storage of all components at the same temperature (2-8°C) for up to 12 months, no freezing required
- Transportation at the same temperature up to 25°C for no more than 10 days is acceptable

**RealBest**<sup>®</sup> kits are certified according to the requirements of Directive 98/79/EC of the European Parliament and of the Council regarding in vitro diagnostic medical devices.

**I. Nucleic acids extraction**

It is recommended to perform nucleic acids extraction in several ways depending on the nature of the biological material of the analyzed sample. The isolation kits include an internal control sample that represents non-competitive DNA. The internal control system ensures control of the extraction efficiency.

Cat. №	Kit name	Number of tests	Clinical specimens	Comments
<b>Manual nucleic acids extraction</b>				
C-8899	<b>RealBest DNA - express</b>	100	epithelial cell specimens from the cervical canal, urethra, vagina, posterior laryngeal wall, conjunctiva, semen, saliva, urine Sample volume – <b>100 µl</b>	Extraction of <b>DNA</b> in 15 min. Lysis Reagent – 100 tubes Transport solution – 100 tubes
C-8897	<b>RealBest DNA - extraction 2</b>	96 (4x24)	blood serum/plasma, biopsy material, cerebrospinal fluid, urine, epithelial cell specimens Sample volume – <b>100 µl</b>	Extraction of <b>DNA</b>
C-8889	<b>RealBest DNA - extraction 3 (variant 6x16)</b>	96 (6x16)	blood serum/plasma, urine, epithelial cell specimens Sample volume – <b>100 µl</b>	Extraction of <b>DNA</b>
C-8896	<b>RealBest extraction 100</b>	48 (6x8)	whole blood, blood serum/plasma, leukocyte blood fraction, biopsy material, cerebrospinal fluid, urine, feces, epithelial cell specimens, tick suspensions Sample volume – <b>100 µl</b>	Extraction of <b>DNA</b> and <b>RNA</b>
C-8895	<b>RealBest extraction 1000</b>	48 (6x8)	blood serum/plasma Sample volume – <b>1 ml</b>	Extraction of <b>DNA</b> and <b>RNA</b>

Cat. №	Kit name	Number of tests	Clinical specimens	Comments
<b>Automated nucleic acids extraction</b>				
C-8883	<b>RealBest UniMag</b>	96 (4x24)	whole blood, blood serum/plasma, leukocyte blood fraction, biopsy material, cerebrospinal fluid, urine, feces, epithelial cell specimens, tick suspension Sample volume – <b>100 µl</b>	Extraction of <b>DNA and RNA</b> (for KingFisher Flex systems)
C-8878	<b>RealBest DNA-extraction 3 (variant 2x48)</b>	96 (2x48)	blood serum/plasma, epithelial cell specimens Sample volume – <b>100 µl</b>	Extraction of <b>DNA</b> (for KingFisher Flex systems and robotic platforms TECAN Freedom EVO)
C-8847	<b>RealBest Sorbitus variant 4x24</b>	96 (4x24)	nasal, nasopharyngeal, and oropharyngeal swabs, sputum, bronchoalveolar lavage fluid	Extraction of <b>DNA and RNA</b> (for any open-type automated NA extraction systems)
C-8848	<b>RealBest Sorbitus variant 1x96</b>	96 (1x96)	Recommended for respiratory infections Sample volume – <b>100µl</b>	
<b>Solutions and components</b>				
C-8887	<b>Lysis Reagent</b>	200	epithelial cell specimens from the cervical canal, urethra, vagina, posterior laryngeal wall, conjunctiva, semen, saliva, urine	Extraction of <b>DNA</b> (200 tubes, 500 µl each)
C-8894	<b>Transport solution (1)</b>	100	biopsy material, epithelial cell specimens from cervical canal, urethra, vagina, posterior laryngeal wall, conjunctiva	100 tubes, 300 µl each
C-8885	<b>Transport solution (2)</b>	200	biopsy material, epithelial cell specimens from cervical canal, urethra, vagina, posterior laryngeal wall, conjunctiva	200 tubes, 1000 µl each
C-8881	<b>Internal Control sample</b>	192	Control of the efficiency of nucleic acids extraction and the absence of PCR inhibitors in specimens.	Kit contents: ➤ Internal Control sample, lyophilized, 6 vials, ➤ Recovery Solution for Control sample, 2 vials, 4 ml each, ➤ Specimen Diluent, 4 vials, 15 ml each

## II. Reagents for DNA/RNA amplification

### Different formats:

**Str-format:** Ready Master Mix is lyophilized in 0,2 ml white tubes of the 96-tube plate. The only step required for the reaction procedure is the addition of extracted DNA/RNA samples.

**Uni-format:** Ready Master Mix is lyophilized in clear 0,2 ml tubes. Add the extracted DNA/RNA into the tubes and run the test. One tube – one reaction.

### Real-Time PCR systems and formats:

**Str, Uni** formats can be used with: **CFX96** (Bio-Rad, USA), **DTlite** (DNA-Technology, Russia).

**Uni** can be used with: **Rotor-Gene Q** (Qiagen, Germany), **Rotor-Gene 3000/6000** (Corbett Serearch, Australia).

Number of simultaneously detected pathogens	Detection channels
1	FAM, ROX
2	FAM, ROX, HEX (JOE)
3 and more	FAM, ROX, HEX (JOE), Cy5

*Other real-time PCR cyclers with similar technical characteristics can be used after validation.*

### Kit contents:

**Universal Positive Control sample**- 1 tube, 1 ml

**Ready Master Mix for PCR**, lyophilized - 96 tubes

Cat. №	Format	Kit name	Number of test
<b>Quantification of human DNA in clinical specimens</b>			
D-8888	Str	<b>RealBest Sample Validation</b>	96
<b>Hepatitis A virus RNA</b>			
D-0398	Str	<b>RealBest RNA HAV</b> (kvalitatívna detekcia – 50 kópií/ml)	48
<b>Hepatitis G virus RNA</b>			
D-1298	Str	<b>RealBest RNA HGV</b> (kvalitatívna detekcia – 50 kópií/ml)	48
<b>Sexually transmitted infections (STIs)</b>			
D-1998	Str	<b>RealBest DNA Chlamydia trachomatis</b>	96
D-2098	St	<b>RealBest DNA Trichomonas vaginalis</b>	96

Cat. №	Format	Kit name	Number of test
D-4396	Str	RealBest DNA Mycoplasma genitalium	96
D-4498	Str	RealBest DNA Neisseria gonorrhoeae	96
D-4494	Str	RealBest DNA Neisseria gonorrhoeae test 2	96
D-1898	Str	RealBest DNA Treponema pallidum	96
<b>Multiplex kits for STIs detection</b>			
D-0455	Str	RealBest DNA Chlamydia trachomatis/Ureaplasma species	96
D-0492	Str	RealBest DNA Chlamydia trachomatis/Ureaplasma urealyticum	96
D-0490	Str	RealBest DNA Chlamydia trachomatis/Mycoplasma genitalium	96
D-0498	Str	RealBest DNA Chlamydia trachomatis/Trichomonas vaginalis	96
D-0457	Str	RealBest DNA Chlamydia trachomatis/Neisseria gonorrhoeae	96
D-0494	Str	RealBest DNA Mycoplasma hominis/Mycoplasma genitalium	96
D-0496	Str	RealBest DNA Trichomonas vaginalis/Neisseria gonorrhoeae	96
D-0477	Str	RealBest DNA Trichomonas vaginalis/Gardnerella vaginalis	96
D-0444	Str	RealBest DNA Candida albicans/Gardnerella vaginalis	96
D-0488	Str	RealBest PCR-12 - differential detection of DNA <i>Chlamydia trachomatis</i> , <i>Ureaplasma species</i> , <i>Mycoplasma hominis</i> , <i>M. genitalium</i> , <i>Trichomonas vaginalis</i> , <i>Neisseria gonorrhoeae</i> , <i>Candida albicans</i> , <i>Gardnerella vaginalis</i> , <i>Cytomegalovirus</i> , <i>Herpes simplex typu 1 a 2</i> , <i>HPV 16 a 18</i> )	96
<b>Vaginal dysbiosis</b>			
D-2292	Str	RealBest DNA Ureaplasma species	96
D-2298	Str	RealBest DNA Ureaplasma urealyticum	96

Cat. №	Format	Kit name	Number of test
D-4398	Str	RealBest DNA Mycoplasma hominis	96
D-4598	Str	RealBest DNA Gardnerella vaginalis	96
D-4205	Str	RealBest Laktonorm – determination of the percentage of <i>Lactobacillus sp.</i> in the total number of bacteria	96
D-4228	Str	RealBest DNA Streptococcus agalactiae	96
<b>Multiplex kits for dysbiosis detection</b>			
D-2294	Str	RealBest DNA Ureaplasma urealyticum/Ureaplasma parvum	96
D-4207	Str	RealBest DNA Gardnerella vaginalis/Atopobium vaginae	96
D-4212	Str	RealBest DNA Prevotella species/Leptotrichia amnionii group	96
D-4201	Str	RealBest DNA Mobiluncus mulieris/Mobiluncus curtisii	96
D-4214	Str	RealBest DNA Saccharimonas aalborgensis (TM7)/BVAB2	96
D-4225	Str	RealBest Bioflor – determination of the percentage of <i>Lactobacillus sp.</i> and bacteria causing vaginosis and vaginitis ( <i>Gardnerella vaginalis</i> , <i>Atopobium vaginae</i> , <i>Prevotella species</i> , <i>Leptotrichia amnionii group</i> , <i>Streptococcus species</i> , <i>Enterococcus species</i> , <i>Staphylococcus species</i> ) in the total number of bacteria	96
<b>Mycoses</b>			
D-4698	Str	RealBest DNA Candida albicans	96
<b>Multiplex kits of mycoses detection</b>			
D-0448	Str	RealBest DNA Candida albicans/Fungi	96
D-0440	Str	RealBest DNA Candida parapsilosis/Candida tropicalis	96
D-0442	Str	RealBest DNA Candida famata/Candida guilliemondii	96
D-0446	Str	RealBest DNA Candida krusei/Candida glabrata	96

Cat. №	Format	Kit name	Number of test
<b>Human papillomaviruses</b>			
D-8447	Str	<b>RealBest DNA HPV 44</b>	96
D-8448	Str	<b>RealBest DNA HPV 66</b>	96
D-8488	Str	<b>RealBest DNA HPV 68</b>	96
<b>Multiplex kits of HPV detecion</b>			
D-8475	Str	<b>RealBest DNA HPV 6/11</b>	96
D-8473	Str	<b>RealBest DNA HPV 16/18</b>	96
D-8459	Str	<b>RealBest DNA HPV 26/51</b>	96
D-8471	Str	<b>RealBest DNA HPV 31/33</b>	96
D-8469	Str	<b>RealBest DNA HPV 35/45</b>	96
D-8446	Str	<b>RealBest DNA HPV 6/11/44</b>	96
D-8449	Str	<b>RealBest DNA HPV 26/53/66</b>	96
D-8451	Str	<b>RealBest DNA HPV 68/73/82</b>	96
D-8444	Str	<b>RealBest DNA HPV screen</b> (detection of HPV types 16,18,31,33,35,39,45,51,52,56,58,59,66,68)	96
D-8479	Str	<b>RealBest DNA HPV high risk genotyp</b> (differential detection of HPV types 16,18,31,33,35,39,45,51,52,56,58,59)	96
D-8478	Str	<b>RealBest DNA HPV high risk genotyp quantitative</b> (differential detection and quantifications of HPV types 16,18,31,33,35,39,45,51,52,56,58,59)	96



Cat. №	Format	Kit name	Number of test
<b>Human herpes viruses and TORCH-infections</b>			
D-1798	Str	RealBest DNA Toxoplasma gondii	48
D-2598	Str	RealBest DNA Rubella	48
D-2801	Str	RealBest DNA Parvovirus B19	96
D-2193	Str	RealBest DNA Herpes simplex virus 1,2	96
D-2185	Str	RealBest DNA Varicella-zoster virus	48
D-2198	Str	RealBest DNA Epstein-Barr virus (quantification is possible)	96
D-1598	Str	RealBest DNA Human cytomegalovirus (quantification is possible)	96
D-2150	Str	RealBest DNA Human herpes virus 6	48
D-2148	Str	RealBest DNA Human herpes virus 8	48
<b>Multiplex kits for human herpes viruses detection</b>			
D-2195 D-2197	Str Fla	RealBest DNA Herpes simplex virus 1/Herpes simplex virus 2	96
D-0489 D-0486	Str Fla	RealBest DNA Cytomegalovirus/Herpes simplex virus 1,2	96
<b>Tick-borne infections</b>			
D-1198	Str	RealBest RNA TBEV	48
D-1498	Str	RealBest DNA Borrelia burgdorferi sensu lato ( <i>Borrelia afzelii</i> , <i>B. garinii</i> , <i>B. burgdorferi sensu stricto</i> )	48
D-1495	Str	RealBest DNA Borrelia miyamotoi	48
D-5389	Str	RealBest DNA Babesia species	48
D-5391	Str	RealBest DNA Rickettsia species	48

Cat. №	Format	Kit name	Number of test
<b>Multiplex kits for tick-borne detection</b>			
D-5393	Str	RealBest DNA Rickettsia sibirica/Rickettsia heilongjiangensis	48
D-5396	Str	RealBest DNA Borrelia burgdorferi s.l./RNA TBEV	48
D-5398	Str	RealBest DNA Anaplasma phagocytophilum/Ehrlichia muris,E.chaffeensis	48
<b>Nosocomial infections</b>			
D-4222	Str	RealBest DNA Enterococcus faecalis/Enterococcus faecium	96
D-5601	Str	RealBest DNA Acinetobacter baumannii/Stenotrophomonas maltophilia	96
D-5603	Str	RealBest DNA Staphylococcus aureus/mecA/lukS-PV	96
D-5605	Str	RealBest DNA Klebsiella pneumoniae/Pseudomonas aeruginosa	96
<b>Respiratory infections</b>			
D-5580	Str	RealBest RNA SARS-CoV-2	96
D-5586	Str	RealBest DNA Bordetella species/Bordetella pertusis/Bordetella bronchiseptica	48
D-5590	Str	RealBest DNA Streptococcus pneumoniae	48
D-5592	Str	RealBest DNA Haemophilus influenzae	48
D-5594	Str	RealBest DNA Chlamydomytila pneumoniae	48
D-5596	Str	RealBest DNA Mycoplasma pneumoniae	48
D-5598	Str	RealBest DNA Legionella pneumophila	48

## Gastrointestinal infections

D-3798	Str		<b>RealBest DNA Helicobacter pylori</b>	48
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## Tuberculosis

D-2398	Form 1	Uni*	<b>RealBest DNA Mycobacterium tuberculosis complex</b>	48
D-2399	Form 2	Str	<b>(MBTC)</b>	96

\* format Uni contains reagents for nucleic acids extraction