

Sample preparation

## Innovative MagMAX kits support multiple downstream qPCR workflows

### Versatility in nucleic acid isolation for infectious disease research

Working with infectious disease pathogens is often labor-intensive and manual. This is especially true when infectious disease researchers have to work with a variety of sample types for different disease applications including respiratory, sexually transmitted, vector-borne, and bloodborne illnesses. Each disease application poses a different challenge, and it is imperative to have an effective solution for nucleic acid extraction when working with infectious disease pathogens.

Achieve simple, streamlined workflows for various research applications with Applied Biosystems™ MagMAX™ kits on Thermo Scientific™ KingFisher™ automated purification instruments. MagMAX kits are specifically designed to extract nucleic acid from a variety of pathogens in different sample types with KingFisher systems. They take advantage of magnetic bead technology, which allows sensitive, specific, and reliable extraction. This method is scalable with the different KingFisher platforms in a low-, moderate-, or high-throughput environment.

#### Automate MagMAX nucleic acid isolation kits using KingFisher instruments

Discover the power of magnetic bead–based MagMAX kits for nucleic acid purification. You can obtain high-quality nucleic acids from a variety of sample types while saving time and embracing consistency by using these kits with KingFisher instruments for automated sample purification.

- **Saves time**—faster processing times when combined with KingFisher purification systems
- **Fewer manual steps**—reduce manual steps with versatile automation options incorporated with MagMAX technologies supporting various sample or pathogen research
- **Consistent results**—reproducible recovery of high-quality RNA and DNA with less variation in each run; compatible with many downstream applications





Applied Biosystems™  
MagMAX™ Viral/  
Pathogen I Nucleic  
Acid Isolation Kit



Applied Biosystems™  
MagMAX™ Viral/  
Pathogen II Nucleic  
Acid Isolation Kit



Applied Biosystems™  
MagMAX™ Viral/Pathogen  
Ultra Nucleic Acid  
Isolation Kit



Applied Biosystems™ MagMAX™  
DNA Multi-Sample Ultra 2.0 Kit



Applied Biosystems™  
MagMAX™ Prime  
Viral/Pathogen NA Isolation Kit

### Verified MagMAX kit capabilities (RUO)

| MagMAX chemistry  | Common sample types   | Common targets   | Nucleic acid                  | Cat. No. |
|---|---|--|-------------------------------|----------|
| <b>MagMAX Viral/Pathogen I Nucleic Acid Isolation Kit</b>           | Swabs in transport media, saliva, urine, serum, plasma  | Viruses, gram-negative bacteria  | RNA, DNA                      | A48310   |
| <b>MagMAX Viral/Pathogen II Nucleic Acid Isolation Kit</b>          | Swabs in transport media, saliva, urine, serum, plasma  | Viruses, gram-negative bacteria  | RNA, DNA                      | A48383R  |
| <b>MagMAX Viral/Pathogen Ultra Nucleic Acid Isolation Kit</b>       | Swabs in transport media, saliva, urine, serum, plasma  | Viruses, gram-negative bacteria, gram-positive bacteria, yeast/fungus            | RNA, DNA, bacteria            | A42356   |
| <b>MagMAX DNA Multi-Sample Ultra 2.0 nucleic acid isolation kit</b> | Whole blood, saliva, buffy coat, buccal swabs, blood cards, cultured cells, tissues                                 | Viral DNA, genomic DNA   | DNA                           | A36570   |
| <b>MagMAX Prime Viral/Pathogen NA Isolation Kit</b>                 | Swabs in transport media, saliva, urine, plasma, serum, fecal swabs in transport media, raw stool, stabilized stool | Viruses, gram-negative bacteria, gram-positive bacteria, yeast/fungus, parasites | RNA, DNA, bacteria, parasites | A58145*  |

Note: Thermo Scientific™ KingFisher™ Presto instrument script for automation integration is available for MagMAX Viral/Pathogen I Nucleic Acid Isolation Kit and is dependent on sample type and workflow. All research workflows must be evaluated by the lab for compatibility.

\* Accessory Cat. Nos.: A58153, A58154, A58155, and A59053

### Suggested MagMAX kits (RUO) by research application for common sample types

| Research application                          | Common sample type  | MagMAX chemistry  |
|---|---|---|
| <b>Viral/pathogen application</b>             |   |   |
| <b>Sexually transmitted infections</b>        | Plasma, serum, urine, whole blood, swabs in transport media, semen  | MagMAX Viral/Pathogen I Nucleic Acid Isolation Kit<br>MagMAX Viral/Pathogen II Nucleic Acid Isolation Kit<br>MagMAX Viral/Pathogen Ultra Nucleic Acid Isolation Kit<br>MagMAX Prime Viral/Pathogen NA Isolation Kit |
| <b>Transplant infections</b>                  | Plasma, serum, urine, whole blood, swabs in transport media, saliva |   |
| <b>Respiratory tract infections</b>           | Plasma, swabs in transport media, sputum, aspirate, lavage          |   |
| <b>Vector-borne diseases</b>                  | Plasma, serum, urine, whole blood                                   |   |
| <b>Hepatitis</b>                              | Plasma, serum, whole blood  |   |
| <b>Gastrointestinal (GI) tract infections</b> | Raw stool, fecal swabs in transport media                           |   |
| <b>Genomic DNA application</b>                |   |   |
| <b>Blood clotting</b>                         | Whole blood   | MagMAX DNA Multi-Sample Ultra 2.0 Kit   |

## MagMAX kits (RUO) by research application and various pathogen types

| Research application              | Pathogen type                           | Target   | MagMAX chemistry                                   |  |  |
|-----------------------------------|---|--|--|--|--|
| Sexually transmitted infections   | Viruses                                 | Herpes simplex virus (HSV-1/2)                 | MagMAX Viral/Pathogen I Nucleic Acid Isolation Kit | MagMAX Prime Viral/Pathogen NA Isolation Kit |  |
|                                   |   | HIV type 1 (HIV-1)                             |  |  |  |
|                                   |   | Human papillomavirus (HPV)                     |  |  |  |
|                                   | Bacteria (gram-negative)                | <i>Chlamydia trachomatis</i> (CT)              |  |  | MagMAX Viral/Pathogen II Nucleic Acid Isolation Kit    |
|                                   |   | <i>Mycoplasma hominis</i> (MH)                 |  |  |  |
|                                   |   | <i>Neisseria gonorrhoeae</i> (NG)              |  |  |  |
|                                   |   | <i>Treponema pallidum</i> (TP)                 |  |  |  |
|                                   |   | Ureaplasma                                     |  |  |  |
|                                   | Protozoa                                | <i>Trichomonas vaginalis</i> (TV)              |  |  | MagMAX Viral/Pathogen Ultra Nucleic Acid Isolation Kit |
|                                   |   | Bacteria (gram-positive)                       |  |  |  |
| <i>Mycoplasma genitalium</i> (MG) |   |  |  |  |  |
| <i>Ureaplasma parvum</i> (UP)     |   |  |  |  |  |
| Transplant infections             | Viruses                                 | BK virus (BKV)                                 | MagMAX Viral/Pathogen I Nucleic Acid Isolation Kit | MagMAX Prime Viral/Pathogen NA Isolation Kit |  |
|                                   |   | Cytomegalovirus (CMV)                          |  |  |  |
|                                   |   | Epstein-Barr virus (EBV)                       |  |  |  |
|                                   |   | HSV-1/2  |  |  |  |
|                                   |   | Human herpesvirus 6/7 (HHV-6/7)                |  |  |  |
|                                   |   | Human herpesvirus 8 (HHV-8)                    |  |  |  |
|                                   |   | JC virus (JCV)                                 |  |  |  |
|                                   |   | Parvovirus B19 (PVB19)                         |  |  |  |
|                                   |   | Varicella-Zoster virus (VZV)                   |  |  |  |
|                                   | Fungus                                  | Aspergillus                                    |  |  | MagMAX Viral/Pathogen Ultra Nucleic Acid Isolation Kit |
| Respiratory tract infections      | Viruses                                 | Enterovirus                                    | MagMAX Viral/Pathogen I Nucleic Acid Isolation Kit | MagMAX Prime Viral/Pathogen NA Isolation Kit |  |
|                                   |   | Adenovirus (AdV)                               |  |  |  |
|                                   | Bacteria (gram-negative)                | <i>Bordetella pertussis/parapertussis</i> (BP) |  |  | MagMAX Viral/Pathogen II Nucleic Acid Isolation Kit    |
|                                   |   | <i>Mycoplasma pneumoniae</i> (MP)              |  |  |  |
|                                   |   | <i>Chlamydia pneumoniae</i> (CP)               |  |  |  |
| Bacteria (weak gram-positive)     | <i>Mycobacterium tuberculosis</i> (MTB) |  |  |  |  |
| Vector-borne diseases             | Bacteria (gram-negative)                | <i>Borrelia</i> spp.                           |  |  |  |
| Hepatitis                         | Viruses                                 | Hepatitis B virus (HBV)                        | MagMAX Prime Viral/Pathogen NA Isolation Kit       |  |  |
|                                   |   | Hepatitis C virus (HCV)                        |  |  |  |
| Blood clotting                    | Genomic DNA (gDNA)                      | Factor II Prothrombin                          | MagMAX DNA Multi-Sample Ultra 2.0 Kit              |  |  |
|                                   |   | Factor V Leiden                                |  |  |  |
|                                   |   | Factor XIII V34L                               |  |  |  |
|                                   |   | MTHFR C677T                                    |  |  |  |
|                                   |   | MTHFR A1298C                                   |  |  |  |
|                                   |   | PAI-1  |  |  |  |

## Ordering information

| Description  | Cat. No. |
|--|----------|
| <b>Reagents</b>  |          |
| MagMAX Viral/Pathogen I Nucleic Acid Isolation Kit           | A48310   |
| MagMAX Viral/Pathogen II Nucleic Acid Isolation Kit          | A48383R  |
| MagMAX Viral/Pathogen Ultra Nucleic Acid Isolation Kit       | A42356   |
| MagMAX DNA Multi-Sample Ultra 2.0 Kit                        | A36570   |
| MagMAX Prime Viral/Pathogen NA Isolation Kit                 | A58145   |
| <b>Purification systems</b>                                  |          |
| KingFisher Apex Purification System with 96 Deep-Well Head*  | 5400930  |
| KingFisher Apex Purification System with 24 Combi Head*      | 5400940  |
| KingFisher Flex Purification System with 24 Deep-Well Head*  | 5400640  |
| KingFisher Flex Purification System with 96 Deep-Well Head*  | 5400630  |
| KingFisher Presto Purification System with 24 Deep-Well Head | 5400840  |
| KingFisher Presto Purification System with 96 Deep-Well Head | 5400830  |

\* For Laboratory Use.

 Learn more at [thermofisher.com/magmax](https://thermofisher.com/magmax)