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A requirement for any pathogen detection workflow!

The Applied Biosystems™ MagMAX™ CORE Nucleic Acid Purification Kit is a universal sample extraction solution for real-time PCR, sequencing and genotyping applications for animal, human and plant studies. This robust magnetic bead-based kit features reagents stored at room temperature, can be used in manual or automated workflows, and is oft-cited for pathogen detection.

The following citation list reflects the flexibility of use for multiple pathogen testing workflows. It captures experimental goals, applications and use of MagMAX CORE Nucleic Acid Purification Kit in each of the publication. With the SARS-CoV-2 pandemic, multiple publications that incorporate this kit for SARS-CoV-2 research studies of pediatric patients, fomite analysis and several others can be found.

The content is easy to search using animal name, disease name, application or vector name.

Example using search term: **WGS**

Publication Links	Disease /Host	Application	Product Usage
A novel canis lupus familiaris reference genome improves variant resolution for use in breed specific GWAS. https://www.life-science-alliance.org/content/lsa/4/4/e202000902.full.pdf DOI: 10.26508/lsa.202000902 Other citation: https://www.biorxiv.org/content/10.1101/2020.08.26.269076v1.abstract	Canis Lupis (Dog-Labrador Retriever)	Whole Genome sequencing (WGS) of canine samples.	DNA was isolated from canine blood stored in PAXgene tubes and vacutainer-EDTA storage conditions. MagMAX CORE performance was compared with phenol chloroform and other blood kits for WGS applications.

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Citation list of Applied Biosystems™ MagMAX™ CORE Nucleic Acid Purification Kit

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Inactivation of foot-and-mouth disease virus A/IRN/8/2015 with commercially available lysis buffers. https://doi.org/10.1016/j.jviromet.2020.113835	Foot & Mouth Disease (FMD)	Cell culture analysis for FMD inactivation	Comparison of 3 commercial buffers including Applied Biosystems™ MagMAX™ CORE Nucleic Acid Purification Kit for FMD inactivation were tested in samples such as bovine milk, epithelial tissues from bovine vesicles and cell culture supernatant.
Evaluation of a high-throughput nucleic acid extraction method for the detection of Mycobacterium avium subsp. paratuberculosis in bovine fecal samples by PCR. https://doi.org/10.1177/1040638721991118	Mycobacterium (Avium) paratuberculosis (MAP)	PCR analysis of Mycobacterium from fecal samples	The MagMAX CORE kit was deployed using a manual mechanical lysis step for detection of MAP from bovine fecal samples. The established protocol identified all the positive and negative samples accurately.
Towards a Sampling Rationale for African Swine Fever Virus Detection in Pork Products https://doi.org/10.3390/foods9091148	African Swine fever (ASF)	Real-Time PCR of ASF in food matrices for food testing labs & surveillance using CORE and Vet Max ASF kit	Assessment of Vet MAX qPCR assay with bone marrow, pork loin or meat juice samples. Performance indicates greater sensitivity for VetMAX kit Vs.OIE prescribed King assay. The MagMAX CORE was used for extraction of nucleic acid from pork products.
Abstract PO-075: Performance comparison of five extraction kits for SARS-CoV-2 RNA extraction https://clincancerres.aacrjournals.org/content/26/18_Supplement/PO-075.abstract	SARS-CoV-2 (COVID-19)	SARS-CoV-2 qPCR real time PCR detection	Comparative analysis of five commercially available RNA extraction kits for SARS-CoV-2 virus recovery. The MagMAX CORE and Omega kits were assessed to perform better in this analysis.
Association of the invasive Haemaphysalis longicornis tick with vertebrate hosts, other native tick vectors, and tick-borne pathogens in New York City, USA https://doi.org/10.1016/j.ijpara.2020.08.008	Presence of multiple pathogens in Asian Longhorn Tick	Cell culture and Real Time PCR analysis using a nanoscale PCR Pathogen testing in disease vectors	The MagMAX CORE kit was used to detect pathogen nucleic acid from host tissue, blood, and engorged larvae of ticks. Host samples showed presence of Borrelia burgdorferi, Anaplasma phagocytophilum, Rickettsia spp., Mycoplasma haemocanis, and Bartonella spp.
Evaluation of mobile real-time polymerase chain reaction tests for the detection of severe acute respiratory syndrome coronavirus 2 https://doi.org/10.1038/s41598-021-88625-6	SARS-CoV-2 in Vero cells	Real- Time PCR application for SARS-CoV-2 in viral cultures	Hamster sample evaluation for SARS-CoV-2 and cultured SARS-CoV-2 in Vero cells.
COMPARISON OF DIFFERENT KITS FOR SARS-CoV-2 RNA EXTRACTION MARKETED IN BRAZIL https://doi.org/10.1101/2020.05.29.122358 Other genotyping work with SARS-CoV-2: https://link.springer.com/article/10.1186/s12864-021-07708-w	SARS-CoV-2 Brazilian strain in Vero cells	Real- Time PCR analysis of SARS-CoV-2 in cultured virus	The MagMAX CORE comparison with silica column-based methods for SARS-CoV-2 extraction. Higher sensitivity with MagMAX kits vs. Silica or phenol chloroform (Trizol) based methods.
Development of a Genus-Specific Brucella Real-Time PCR Assay Targeting the 16S-23S rDNA Internal Transcribed Spacer from Different Specimen Types. https://doi.org/10.3390/vetsci7040175 Other citation for Brucella (ITS 16-23s analysis) https://repository.up.ac.za/handle/2263/77428	Brucella abortus biovar in multiple matrices	Real-Time PCR of the ribosomal ITS in Bovine samples	Spike in analysis of Brucella. abortus biovar 1 (B01988-18 strain) in Bovine blood, milk, and tissues to analyze best matrix for pathogen detection. Tissue>Blood>Milk with respect to sensitivity of detection.
Borrelia burgdorferi Sensu Stricto DNA in Field-Collected Haemaphysalis longicornis Ticks, Pennsylvania, United States 10.3201/eid2702.201552	Borreliaburgdorferi in H longicornis tick	Real-Time PCR detection of Borrelia burgdorferi	The MagMAX CORE kit was used with the KingFisher Flex purification protocol to isolate DNA from H.longicornis tick for identification of B. burgdorferi sensu stricto, B. mayonii, B. miyamotoi, and Babesia microti.
A novel canis lupus familiaris reference genome improves variant resolution for use in breed specific GWAS. https://www.life-science-alliance.org/content/lsa/4/4/e202000902.full.pdf DOI: 10.26508/lsa.202000902 Other citation: https://www.biorxiv.org/content/10.1101/2020.08.26.269076v1.abstract	Canis Lupis (Dog-Labrador Retriever)	Whole Genome sequencing (WGS) of canine samples	DNA was isolated from canine blood stored in PAXgene tubes and vacutainer-EDTA storage conditions. The MagMAX CORE performance was compared with phenol chloroform and other blood kits for WGS applications.
Choice of Commercial DNA Extraction Method Does Not Affect 16S Sequencing Outcomes in Cloacal Swabs https://doi.org/10.3390/ani11051372	Bird microbiome in cloacal samples from White leghorn hens	Ribosomal 16s microbial sequencing	Comparison of multiple commercial kits including the MagMAX CORE for 16s ribosomal sequencing.

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Development of a reference standard for the detection and quantification of Mycobacterium avium subsp. paratuberculosis by quantitative PCR https://doi.org/10.1038/s41598-021-90789-0	Reference standard development for Mycobacterium avium	Real-Time PCR of MAP	The MagMAX CORE kit with mechanical lysis module was used to isolate DNA from a lyophilized MAP standard. Real time PCR analysis using the VetMAX MAP Gold Kit was carried out.
Think of the Children: Evaluation of SARS-CoV-2 Rapid Antigen Test in Pediatric Population. https://doi.org/10.1097/INF.0000000000003101	SARS-CoV-2 testing in children	Real-Time PCR analysis of COVID-19	Automated RNA extraction using the MagMAX CORE kit for extraction of SARS-CoV-2 in pediatric samples.
Prevalence of single and coinfections of human pathogens in Ixodes ticks from five geographical regions in the United States, 2013–2019. https://doi.org/10.1016/j.ttbdis.2020.101637	Borreliaburgdorferi pathogens in Lyme, anaplasmosis and Babesiosis Ixodes ticks	Pathogen testing in disease carrying vectors	Testing in 13400 tick samples across USA for Lyme and other human diseases in ticks.
Investigation of bovine ephemeral fever virus transmission by putative dipteran vectors under experimental conditions https://doi.org/10.1186/s13071-020-04485-5 Other: Culicoides citations: https://parasitesandvectors.biomedcentral.com/articles/10.1186/s13071-018-3283-9 Flight and Culicoides surveillance: https://parasitesandvectors.biomedcentral.com/articles/10.1186/s13071-020-04552-x	Bovine ephemeral fever disease (BEFV) in mosquito vectors	Bovine pathogens in vectors using quantitative RT-PCR	The MagMAX CORE purification with KingFisher FLEX automated system for nucleic acid extraction from 3 mosquito species (Aedes aegypti, Culex pipiens and Culex quinquefasciatus) and Culicoides.
Bluetongue virus detection in new Culicoides species in Sardinia, Italy https://bvajournals.onlinelibrary.wiley.com/doi/abs/10.1136/vr.105118 Others citations on Blue Tongue: https://www.frontiersin.org/articles/10.3389/fvets.2020.00170/full?report=reader https://www.frontiersin.org/articles/10.3389/fvets.2020.00112/full?report=reader https://journals.asm.org/doi/full/10.1128/JVI.01834-20	Blue Tongue (RNA-Orbivirus) virus (BTV) detection in Culicoides midges	Real Time PCR detection of BTV in vectors	RNA was extracted with the MagMAX CORE Nucleic Acid Purification Kit (Applied Biosystems) in automated sample preparation workstation MagMAX Express 96 (Applied Biosystems) and then processed with a real time RT-PCR.
Development of a real-time PCR assay for detection of African swine fever virus with an endogenous internal control. https://doi.org/10.1111/tbed.13582	African Swine Fever (ASF)	Real-Time PCR analysis of ASF	ASF isolates from multiple countries were tested in a newly developed multiplexed Real time PCR assay and shown to perform better than Zsak assay. Viral nucleic acids were extracted using the MagMAX CORE from cell cultures tested.
Effectiveness of favipiravir (T-705) against wild-type and oseltamivir-resistant influenza B virus in mice. https://doi.org/10.1016/j.virol.2020.02.005 Other citation: Favipiravir: https://journals.asm.org/doi/full/10.1128/AAC.01897-20	Studies of influenza B resistance mutations in Mice	Analysis of RNA-dependent RNA polymerase (RdRp) inhibitors for resistance mutations using real time PCR	The MagMAX CORE applied for viral RNA extraction from mice lung samples for influenza B samples resistant to certain drugs.
Preliminary optimization of a simplified sample preparation method to permit direct detection of SARS-CoV-2 within saliva samples using reverse-transcription loop-mediated isothermal amplification (RT-LAMP). https://www.sciencedirect.com/science/article/abs/pii/S0166093420303001 Other citation (saliva): https://www.sciencedirect.com/science/article/pii/S0882401021002473	SARS-CoV-2 in saliva samples	RT-LAMP on Saliva samples for SARS-CoV-2	Saliva samples from healthcare and home settings were processed using the MagMAX™ CORE Nucleic acid purification kit.

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Genomic Sequences of Three SARS-CoV-2 P.1 Strains Identified from Patients Returning from Brazil to Italy https://doi.org/10.1128/MRA.00177-21 Other citation: re-infection of P1 patient with SARS-CoV-2: https://assets.researchsquare.com/files/rs-435535/v2/c6c8cbdf-fb9c-4d2f-bb47-d809f4139114.pdf	SARS-CoV-2 in Brazil P1 strains	NGS based sequencing-for identification of SARS-CoV-2 virus variants	Virus from oropharyngeal swabs stored in MTM inactivation reagent were Virus inactivation was isolated using the MagMAX CORE kit and tested with TaqMan 2019-nCoV assay kit v2 and next generation sequencing was carried out.
UV-C (254 nm) lethal doses for SARS-CoV-2 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7477605/ doi: 10.1016/j.pdpdt.2020.101995	SARS-CoV-2 inactivation by UV- light	SARS-CoV-2 inactivation protocols and analysis by RT-qPCR	Viral stocks were inactivated after UV-C exposure and survival of virus ascertained through Vero cell cultures. RNA extraction was by the MagMAX CORE kit.
Susceptibility of turkeys, chickens and chicken embryos to SARS-CoV-2 https://doi.org/10.1111/tbed.13970 Other citation on topic: https://www.authorea.com/doi/full/10.22541/au.159620977.72227010	SARS-CoV-2 in birds (turkey and chicken)	RT-qPCR for SARS-CoV-2 detection	Multiple tissue samples from chicken and turkey were analyzed by RT-qPCR to check for presence of SARS-CoV-2 virus. RNA extraction deployed the MagMAX CORE Nucleic Acid with automated protocol.
Parentage assignment using microsatellite DNA typing for the endangered numbat (Myrmecobius fasciatus) https://doi.org/10.1071/AM19046	Microsatellite markers in numbats	Genotyping and microsatellite marker analysis in numbats	
A rapid RT-LAMP assay for the detection of all four lineages of Peste des Petits Ruminants Virus https://doi.org/10.1016/j.jviromet.2019.113730 https://www.mdpi.com/1999-4915/12/11/1227 (other PPP citation)	Peste des Petits (PPR) is a viral disease of ruminants	RT-LAMP assay	Manual extraction of PPRV RNA from EDTA treated blood, eye and nasal swab samples was carried out using the Mag MAX CORE Nucleic Acid Purification Kit.
Cell fusing agent virus (Flavivirus) infection in Aedes aegypti in Texas: seasonality, comparison by trap type, and individual viral loads https://doi.org/10.1007/s00705-020-04652-0	Cell fusing Agent virus (CFAV) studies	Real-Time PCR analysis on mosquito vectors to identify flaviviruses	Mosquito pools were homogenized in Hank's buffer salt solution and the resulting supernatant was used for RNA extraction from the MagMAX CORE kit.
Susceptibility of Domestic Swine to Experimental Infection with Severe Acute Respiratory Syndrome Coronavirus 2. doi:10.3201/eid2701.203399 Similar citations: https://www.biorxiv.org/content/10.1101/2020.09.10.288548v1.abstract https://wwwnc.cdc.gov/eid/article/27/1/20-3399_article Susceptibility in Deer to SARS-CoV-2: https://www.biorxiv.org/content/10.1101/2021.01.13.426628v1.abstract	Susceptibility of domestic pigs to SARS-CoV-2	Real-Time PCR detection of SARS-CoV-2 for zoonotic studies	The Mag MAX™ CORE Nucleic Acid Purification were deployed for RNA extraction from swine nasal, oral, rectal swabs; whole blood, oral fluids and other tissues to ascertain detection of SARS-Cov2 in swine.
Seroprevalence of Borrelia burgdorferi in Stray Dogs from Southern Italy https://doi.org/10.3390/microorganisms8111688 Other citation: https://www.mdpi.com/2076-2607/8/11/1688/htm	Borrelia burgdorferi (spirochete) in stray dogs which causes Lyme disease in humans and dogs	Real-time PCR analysis for detection of pathogen	DNA was extracted from canine whole blood with Mag MAX CORE for real time PCR analysis of Osp A gene from Borrelia.
A counter selectable Sucrose Sensitivity Marker Permits Efficient and Flexible Mutagenesis in Streptococcus agalactiae https://journals.asm.org/doi/full/10.1128/AEM.03009-18	Streptococcus agalactiae (group B Streptococcus [GBS]) causes neonatal sepsis and meningitis Infections in adults and zoonotic transfer through fish and other animals possible	Sanger sequencing of GBS	Genomic DNA from GBS and B. subtilis was isolated using Mag MAX™ CORE Nucleic Acid kit in an automated protocol.

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Draft Genome Sequence of Acholeplasma laidlawii Isolated from the Conjunctiva of a Heifer with Infectious Bovine Keratoconjunctivitis https://journals.asm.org/doi/full/10.1128/MRA.01345-20	Acholeplasma spp are described as saprophytes found in soil, compost, and wastewater or commensals distributed in vertebrates, insects, and plants and A laidlawii is found in dairy and beef cattle, including mastitic milk, bulk tank milk, aborted fetuses, semen, preputial samples, nasal secretions, pneumonia, and healthy lungs	Colony analysis and ITS sanger sequencing of Acholeplasma and NGS analysis	DNA was directly extracted from the cultured pellet with the Mag MAX™ CORE Nucleic acid purification kit.
Geometric morphometric wing analysis represents a robust tool to identify female mosquitoes (Diptera: Culicidae) in Germany https://www.nature.com/articles/s41598-020-72873-z Others: Aedes and Zika: https://parasitesandvectors.biomedcentral.com/articles/10.1186/s13071-018-3283-9 https://www.sciencedirect.com/science/article/pii/S0001706X18315766	Mosquito identification (Aedes species)	Cytochrome oxidase subunit I (COI) gene sequencing	DNA isolation was performed from the whole mosquito body using Mag MAX™ CORE Nucleic Acid Purification Kit.
Distribution of avian influenza viruses according to environmental surveillance during 2014–2018, China. https://doi.org/10.1186/s40249-021-00850-3 (Also cites Agpath ID, Superscript III) Other citations: AIV https://assets.researchsquare.com/files/rs-178515/v1/670cac99-20d4-4366-b1c3-5c2f4a077111.pdf	Avian Influenza Virus surveillance in China	RT-PCR detection of Avian influenza and WGS analysis	DNA from poultry-related materials, including poultry feces, drinking water, sewage, and swabs from poultry cages, feathers was purified by a Mag Max Core Nucleic Acid Purification Kit.
A 25-year retrospective study of Chlamydia psittaci in association with equine reproductive loss in Australia. doi: 10.1099/jmm.0.001284 Similar work: Chlamydia psittaci: a suspected cause of reproductive loss in three Victorian horses	Chlamydia psittaci a pathogen of birds can cause Equine reproductive loss	qPCR analysis of 16s gene, genotyping& phenotyping analysis	Multiple tissue samples from equine aborted fetus cases was extracted with the MagMAX CORE Nucleic Acid Purification kit.
Low circulation of Influenza A and coinfection with SARS-CoV-2 among other respiratory viruses during the COVID-19 pandemic in a region of southern Brazil https://onlinelibrary.wiley.com/doi/full/10.1002/jmv.26975 (uses Agpath ID and Taqman Fast Virus MM, TaqMan® Respiratory Tract Microbiota Profiling Experiments (Applied Biosystems™) Other Respiratory virus citations: https://www.nature.com/articles/s41598-020-70090-2	Influenza A and B viruses (FLUAV/FLUBV), human mastadenovirus C (HAdV-C), Enterovirus 68 (EV-68), and rhinovirus (RV) in SARS-CoV-2 hospitalized patients and acute respiratory disease syndrome (ARDS) for co-infection studies	Real Time PCR analysis	Naso-oropharyngeal swabs and Brochoalveolar lavage were subjected to extraction with the MagMAX™ CORE kit to isolate influenza viruses.
Impact of RNA degradation on influenza diagnosis in the surveillance system https://doi.org/10.1016/j.diagmicrobio.2021.115388	RNA degradation of clinical samples, influenza-like illness samples and impact on surveillance studies	Real Time PCR analysis	Throat swabs from Beijing hospitals were probed for influenza A, H1, and B viruses. Nucleic acid was extracted using the MagMAX CORE Nucleic Acid Purification Kit with an automated protocol.
Whole Genome Sequence of the Mycoplasma mucosicanis Type Strain https://journals.asm.org/doi/full/10.1128/MRA.00799-19	Mycoplasma mucosicanis studies in canine samples	Whole Genome sequencing	Mycoplasma collected from genital mucosa, and isolates from the oral of healthy dogs were cultured and subjected to DNA extraction with the MagMAX CORE kit.
Assessment of predominant bacteria in noble pen shell (Pinna nobilis) collected in the Eastern Adriatic Sea https://link.springer.com/article/10.1007/s10661-020-08541-6	Noble pen shell (Pinna nobilis) is an endemic species and the largest known bivalve in the Mediterranean Sea	16s rRNA sequencing	Eight different bacteria: Aestuariibacter sp., Aliivibrio sp., Alteromonas sp., Marinobacter sp., Pseudoalteromonas sp, Rubritalea sp., Thalassospira sp. and the Vibrio splendidus clade.

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Evaluation of oral fluid as an aggregate sample for early detection of African swine fever virus using four independent pen-based experimental studies https://doi.org/10.1111/tbed.14175	Oral fluid as an aggregate to study African Swine Fever pen-based oral fluid samples usage to supplement traditional samples for ASF surveillance	Real Time PCR analysis	Pen-based oral fluid and individual oropharyngeal swabs for ASF detection.
Pathogenesis and tissue tropism of natural field recombinants of infectious laryngotracheitis virus https://www.sciencedirect.com/science/article/pii/S0378113519311770	Infectious laryngotracheitis virus (ILTV) is an economically significant respiratory pathogen of poultry (Chicken)		Development of diagnostic and therapeutic approaches for the detection and prevention of ILTV.
Characterization of Winter Dysentery Bovine Coronavirus Isolated from Cattle in Israel https://doi.org/10.3390/v13061070	Winter Dysentery Bovine Coronavirus (BCoV) in Cattle with hemorrhagic diarrhea and a significant decrease in milk production	RT-qPCR analysis	Analysis of fecal and rectal swabs from animals with BCov symptoms were used to extract RNA using the Mag MAX CORE Nucleic Acid Purification Kit.
Propagation of Rhinovirus C in Differentiated Immortalized Human Airway HBEC3-KT Epithelial Cells https://doi.org/10.3390/v11030216	Propagation of Rhinovirus C in Differentiated Immortalized Human Airway HBEC3-KT Epithelial Cells (Japan)	Cell culture and Real time PCR	Human bronchial tracheal epithelial (HBTE) cells total RNA was also prepared from 100 µL of RNase-treated samples using a MagMAX™ CORE Nucleic Acid Purification Kit with an automated protocol.
Mycoplasma gallisepticum strain ts-304 is a safe and effective live attenuated vaccine for use in chickens. https://www.sciencedirect.com/science/article/pii/S0378113519313793. Other citation for Mycoplasma gallisepticum: https://www.sciencedirect.com/science/article/pii/S037811352031021X Mutagenesis and CRISPR/Cas9: https://www.sciencedirect.com/science/article/pii/S0378113520310063	Studies of Vaxsafe MG (strain ts-11) a live attenuated vaccine against Mycoplasma gallisepticum in poultry		To produce template DNA for PCR, genomic was isolated using the MagMAX™ CORE Nucleic Acid Purification Kit and Invitrogen KingFisher™ Flex.
Sequence analysis of Salmonella enterica isolates obtained from shelter dogs throughout Texas https://onlinelibrary.wiley.com/doi/full/10.1002/vms3.320 Other citation Salmonella through wild bird and environmental contamination in pigs: https://onlinelibrary.wiley.com/doi/full/10.1111/jvim.15896 AMR and genetic diversity Salmonella in humans: https://ueaeprints.uea.ac.uk/id/eprint/77110/	Salmonella enterica in shelter dogs	Whole Genome Sequencing (WGS)	DNA from pure colonies was obtained using an automated extraction process with the MagMAX CORE and quantified using Qubit 2.0 for NGS library preparation.
Host Bloodmeal Identification in Cave-Dwelling Ornithodoros turicata Dugès (Ixodida: Argasidae), Texas, USA https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7917080/	pathogen transmission and management strategies for tick borne disease Comparing soft tick (Argasidae) to hard ticks (Ixodidae)	PCR and Sanger sequencing method for identifying the bloodmeal hosts of soft ticks	DNA was extracted using the MagMAX CORE Nucleic Acid Purification Kit. Assays included Negative and positive controls such as blood from sheep, tiger, and crane not seen in a cave environment.
The Effect of a 160-Kilometer Competitive Endurance Ride on Inflammatory Marker mRNA Expression in Horses. https://doi.org/10.1016/j.jevs.2019.05.017 Other citation on markers in thoroughbreds: https://www.sciencedirect.com/science/article/abs/pii/S0165242721000842 Horses (Infectious diseases): https://journals.sagepub.com/doi/abs/10.1177/1040638720972096 Effect of ascorbic acid and hydrocortisone after liposaccharide injection on horses: https://onlinelibrary.wiley.com/doi/full/10.1111/jvim.15896	Risk factors for horses failing to complete competitive endurance rides	Gene expression analysis for ALOX5AP, CD14, IL-10, IL-1β, IL-6, IL-8, MMP-1, TLR4, TNFα, and TNFSF13B in peripheral blood samples	RNA was isolated using the MagMAX CORE automated protocol.

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Intensive ocular sampling for the detection of subclinical canine herpesvirus-1 shedding in dogs with experimentally induced latent infection. https://doi.org/10.1016/j.vetmic.2021.109001	Canine Herpes virus shedding (CaHV-1)	Real time qPCR from dog eye swab samples	DNA from ocular swab samples was extracted with the MagMAX™ CORE Nucleic Acid Purification Kit.
Detection of Coxiella burnetii and equine herpesvirus 1, but not Leptospira spp. or Toxoplasma gondii, in cases of equine abortion in Australia: a 25-year retrospective study https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0233100 Other citation Pathogen strain I & II identification: https://www.frontiersin.org/articles/10.3389/fmicb.2020.00457/full	Study prevalence of Coxiella burnetii, Leptospira spp and Toxoplasma gondii in 600 aborted equine fetal tissues	qPCR analysis of pathogen in equine tissues	DNA was extracted from 600 aborted equine fetal tissues from the University of Melbourne collection (1994-2019) using the MagMAX ™ CORE Kit.
Ag nanoparticles-based antimicrobial polycotton fabrics to prevent the transmission and spread of SARS-CoV-2. https://doi.org/10.1101/2020.06.26.152520 Similar citations for pathogens and cotton: http://repositori.uji.es/xmlui/handle/10234/192518 Beta-lactamase (ESBL) and antimicrobials: https://www.nature.com/articles/s41598-020-76877-7	Silver nanoparticles and antimicrobial activities in cotton for SARS-CoV-2 (fomite research)	qPCR analysis, antimicrobial, antiviral studies and allergy analysis	Testing for presence of SARS-CoV-2 in silver coated cotton fabrics. Culturing of virus on Vero cells and RNA isolation using the MagMAX CORE kit.
Swine viral detection by adapted Next-Generation Sequencing (NGS) for RNA and DNA species reveals first detection of porcine circovirus type 3 (PCV3) in Chile. https://www.biorxiv.org/content/10.1101/2020.06.07.138925v1.abstract Other citations on Porcine Circovirus (WGS and phylogeny): https://www.mdpi.com/2076-0817/9/5/344	Identification of RNA genome virus: Porcine Rotavirus A (RVA), Porcine Astrovirus type 5 (PAstV-5) and Porcine Feces-Associated IASV-like virus (PfalV) DNA genome viruses such as Porcine Parvovirus 1 (PPV1), Porcine Circovirus type 1 (PCV1), Porcine Circovirus type 3 (PCV3) were found	WGS and Sanger sequencing analysis of Porcine RNA and DNA genome-based viruses	Tissue samples from euthanized animals and still born fetus were used to extract total nucleic acids using the MagMAX™ CORE Kit.
SARS-CoV-2 Infections and Viral Isolations among Serially Tested Cats and Dogs in Households with Infected Owners in Texas, USA https://doi.org/10.3390/v13050938 Other citation: https://www.biorxiv.org/content/10.1101/2020.12.08.416339v1.abstract	SARS-CoV-2 in dogs and cats in homes with positive COVID-19 cases (fomites study)		The respiratory sample was a combination of an oral/oropharyngeal swab, a nasal/nasopharyngeal swab, rectal, fur samples (fomite study) and a conjunctival swab (cats only). Body fur and blood samples were subjected to viral RNA extraction using the MagMAX CORE Nucleic Acid Purification Kit on a 96-well Kingfisher Flex System.
Pathologic changes in pig organs, infected with the Aujeszky's disease. doi: 10.15421/2020_199	Aujeszky's disease (pseudo-rabies) is contagious disease causes significant economic losses in regions with pig and fur farming	Histological studies and PCR analysis	Isolation of viral DNA from pathological material samples was performed using the MagMAX ™ CORE Nucleic Acid Purification Kit from multiple piglet tissues from Aujeszky affected animals.
Not gone but forgotten: Tritrichomonas foetus in extensively managed bulls from Australia's Northern Territory. https://doi.org/10.1016/j.crpvbd.2021.100012 (Cites: VetMax Xeno control; QuantStudio 5.0) Other citation: Microbiota in bulls: https://www.sciencedirect.com/science/article/abs/pii/S0093691X19304960	Tritrichomonas foetus in extensively- managed bulls	Multiplex real time PCR assay	DNA was extracted from all 109 T.foetus in Extensively managed bull samples using the Mag Max Core Nucleic Acid Purification Kit with an automated protocol.
Apparent lack of spill-over of parasites from an invasive anuran: PCR detects Entamoeba in cane toads (Rhinella marina) but not in sympatric Australian native frogs. https://www.sciencedirect.com/science/article/pii/S221322442030064X	Entamoeba in cane toads 173 samples were collected from multiple species of cane toads	Real Time PCR analysis of 16s regions	Total genomic DNA was extracted from approximately 0.05–0.25 g of each faecal sample using the MagMAX™ CORE Nucleic Acid Purification Kit.

Publication Links	Disease /Host	Application	Product Usage
Koi herpesvirus and carp oedema virus: Infections and coinfections during mortality events of wild common carp in the United States. https://doi.org/10.1111/jfd.13082 Other citation: https://onlinelibrary.wiley.com/doi/full/10.1111/jfd.13163	Koi herpesvirus and carp oedema virus	Real Time PCR analysis of KHV and CEV	
Capsular type diversity of Mannheimia haemolytica determined by multiplex real-time PCR and indirect hemagglutination in clinical isolates from cattle, sheep, and goats in Spain. https://www.sciencedirect.com/science/article/pii/S0378113521001449	Mhaemolytica capsular types associated with respiratory disorders in cattle, sheep, and goats		
International proficiency trial demonstrates reliable Schmallenberg virus infection diagnosis in endemic and non-affected countries. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0219054 VetMAX Schmallenberg Virus Kit is also cited.	Schmallenberg virus (SBV), an orthobunyavirus infecting ruminants Ring trial for SBV	PCR analysis	Extensive analysis of multiple commercial kits including the MagMAX CORE Kit was tested in a total of 38 approaches.
Malakoplakia in the Urinary Bladder of 4 Puppies https://journals.sagepub.com/doi/abs/10.1177/03009858211009779	Malakoplakia in humans affects the urinary bladder and observed with von Hansemann–type macrophages, with or without Michaelis-Gutmann bodies, and is frequently associated with Escherichia coli infection We describe the microscopic features of malakoplakia in the urinary bladder of 4 puppies		
Effects of dicopper oxide and copper sulfate on growth performance and gut microbiota in broilers.https://doi.org/10.1016/j.psj.2021.101224	Effect of Copper on gut microbiome in chicken	16s rRNA gene analysis	Bacterial DNA isolation from ileal content with the MagMAX CORE Nucleic Acid Purification Kit.
A Longitudinal Study of Parasitosis With Genotypes of Theileria Orientalis in Calves and Introduced Cattle at Dorrigo, New South Wales, and the Effect on Weight Gains. https://doi.org/10.21203/rs.3.rs-93408/v1 Other citation: http://era.daf.qld.gov.au/id/eprint/7803/	Study of Theileria orientalis (tick) in cattle	Real-time PCR analysis of Theileria to understand susceptibility of newborn calves and new stock to clinical disease with tick infestation	DNA was extracted from ticks using the MagMAX CORE Nucleic Acid Purification Kit.
Rabbit Enteropathies on Commercial Farms in the Iberian Peninsula: Etiological Agents Identified in 2018–2019. https://doi.org/10.3390/ani9121142	Rabbit Enteropathies EPEC, Clostridium spiroforme, Clostridium perfringens, and Group A rotavirus	Bacterial cultures and RT-PCR analysis of pathogens such as Clostridium, EPEC and rotavirus	Total nucleic acids were extracted from digestive organs or caecal swabs using an automated MAX™ CORE Nucleic Acid purification protocol.
Comparative ORF and whole genome sequencing analysis of PRRSV in native samples reveal a recombinant virus strain. https://www.vetline.de/system/files/frei/BMTW-10.23761439-0299-2020-19-Schneider-Buehl.pdf	PRRSV (ORF-5 and ORF4-6) in two pig farms	WGS and RT-PCR analysis	RNA was extracted from blood and lung tissues using the MagMAX CORE and Kingfisher for NGS experiments.
Targeted-Release Organic Acids and Essential Oils Improve Performance and Digestive Function in Broilers under a Necrotic Enteritis Challenge. https://doi.org/10.3390/ani10020259	Necrotic enteritis (NE) is a real threat for poultry	Studies of the V3-V4 regions of microbes and feed analysis impact on gut microbiome in broilers	DNA isolation using the commercial the MagMAX CORE kit from ileal and ceca contents from poultry.
The uropygial gland microbiome of house sparrows with malaria infection. https://onlinelibrary.wiley.com/doi/full/10.1111/jav.02686	House sparrow microbiome and malaria	16s rRNA analysis using Ion Torrent and Ion 16s Metagenomics Kit	Swabs were removed and 30 µl of the MagMAX CORE Nucleic Acid Purification kit (Applied Biosystems, Thermo Fisher Scientific) was added and DNA isolation was performed using the MagMAX CORE kit on uropygial gland excretions collected on swabs for Ion 16S Metagenomics Kit.

Publication Links	Disease /Host	Application	Product Usage
Characteristics of the gut microbiome profile in obese patients with colorectal cancer. https://onlinelibrary.wiley.com/doi/full/10.1002/jgh3.12529	The study assessed fecal samples from 36 patients with colorectal cancer and 38 controls without colorectal cancers to assess gut microbiome profiles	16S rRNA gene amplicon sequencing	Fecal DNA was isolated with the MagMAX CORE and automated protocol with KingFisher.
Gut microbiota in adolescent girls with polycystic ovary syndrome: Effects of randomized treatments https://onlinelibrary.wiley.com/doi/abs/10.1111/ijpo.12734	Polycystic ovary syndrome (PCOS) Gut microbiota in adolescent girls		
Experimental Inoculation of Young Calves with SARS-CoV-2. https://www.mdpi.com/1999-4915/13/3/441	Susceptibility of cattle to SARS-CoV-2 to understand entry routes in tissues with high ACE2 receptors	Cell culture of SARS-CoV-2, serological analysis and Real Time RT-PCR	Extraction of viral RNA from Jugular vein blood using the MagMAX™ CORE extraction kit and automated protocol.
Development and optimisation of a group-specific real-time RT-PCR assay for the broad detection of the Simbu serogroup orthobunyaviruses. https://www.repository.utl.pt/handle/10400.5/15823	Simbu serogroup of 32 single-stranded, negative polarity, tri-segmented RNA viruses, causes reproductive disease in humans and domestic animals	RT-PCR analysis	
Quantifying and modelling the acquisition and retention of lumpy skin disease virus by hematophagous insects reveals clinically but not sub clinically affected cattle are promoters of viral transmission and key targets for control of disease outbreaks. doi: https://doi.org/10.1101/2020.06.18.154252 Other citations: Hematophagous insects and Lumpy skin disease control and transmission https://www.biorxiv.org/content/10.1101/2020.06.18.154252v1.full Additional citation: https://www.biorxiv.org/content/10.1101/2021.04.20.440323v1.abstract	Lumpy Skin Disease (LSD virus) in Cattle	Humoral response to LSD and TaqMan Real time PCR analysis	Nucleic acid from whole blood, PBMC suspension, skin homogenate or insect homogenate was isolated with the MagMAX™ CORE Nucleic Acid Purification Kit and automated protocol.
Foot-and-mouth disease seroprevalence and reporting behaviors in nine northern provinces in Lao PDR: The current situation and challenges for control https://doi.org/10.1111/tbed.14031	Foot and mouth disease seroprevalence and reporting in Laos		Total RNA was extracted from the GenoTube oral swabs (Thermo Fisher Scientific, USA) using the MagMAX™ CORE Nucleic Acid purification kits (Thermo Fisher Scientific, USA) following the manufacturer's instructions.
Immune status, well-being and gut microbiota in military supplemented with synbiotic ice cream and submitted to field training: a randomized clinical trial. DOI: https://doi.org/10.1017/S0007114521000568	Synbiotic ice-cream and gut microbiota		Clinical trial on consumption of placebo ice-cream vs. ice-cream with Bifidobacterium and lactobacillus in military personnel.
From People to Panthera: Natural SARS-CoV-2 Infection in Tigers and Lions at the Bronx Zoo https://www.scienceopen.com/document_file/9b25d6b3-1702-4e78-9b67-ff671bbca640/PubMedCentral/9b25d6b3-1702-4e78-9b67-ff671bbca640.pdf	SARS-CoV-2 in panthers and tigers		Nucleic acid was extracted from nasal and oropharyngeal swabs and fecal samples using the MagMAX™ CORE nucleic acid purification kit using an automated protocol with Kingfisher Flex.
Ecology of West Nile Virus in the Danube Delta, Romania: Phylo geography, Xeno surveillance and Mosquito Host-Feeding Patterns https://doi.org/10.3390/v11121159 https://www.mdpi.com/1999-4915/11/12/1159	West Nile Virus analysis	Sanger sequencing and IgG Antibody analysis	Mosquito pools between 1 and 250 specimens were pooled and RNA was extracted with a King Fisher and MagMAX™ CORE MAX CORE Nucleic acid Purification Kit.
Effectiveness and potential application of sex-identification DNA markers in tunas DOI: https://doi.org/10.3354/meps13563	Sex identification in Tuna's		

applied biosystems

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Vertebrate-Aedes aegypti and Culex quinquefasciatus (Diptera)-arbovirus transmission networks: Non-human feeding revealed by meta-barcoding and next-generation sequencing https://doi.org/10.1371/journal.pntd.0008867	Aedes and Culex and arbovirus transmissions	Host feeding patterns in Aedes and Culex mosquitoes using a DNA metabarcoding application using NGS	Non-engorged Ae. aegypti mosquitoes were tested for arboviruses including the four serotypes of DENV, ZIKV, and CHIKV. Mosquito pools were homogenized and tested for DENV, Zika and Chikungunya virus. MagMAX™ CORE Nucleic Acid Purification. DENV and Path ID Multiplex one step were used. The resultant samples were sequenced on an Ion Torrent S5 system.
Pathologic and immunohistochemical findings in an outbreak of systemic toxoplasmosis in a mob of red kangaroos https://journals.sagepub.com/doi/abs/10.1177/10406387211001869	Toxoplasma gondii is a zoonotic protozoan pathogen that infects vertebrates: Humans, cats, and kangaroos	Real time qPCR and immunohistochemical analysis of Toxoplasmosis	
A sensitive method for the recovery of Escherichia coli serogroup O55 including Shiga toxin-producing variants for potential use in outbreaks. https://doi.org/10.1111/jam.14345	Shiga toxin-producing Escherichia coli (STEC) cause bloody diarrhea, kidney failure and occasionally death	Use of NGS, latex agglutination and NGS sequencing applications	Fresh growth of E. coli O55 was carried out on on CHROMagar ECC and the lysate after heat denaturation was subjected to DNA isolation using the MagMAX™ CORE Kit.
Latency characteristics in specific pathogen-free chickens 21 and 35 days after intra-tracheal inoculation with vaccine or field strains of infectious laryngotracheitis virus. https://www.tandfonline.com/doi/abs/10.1080/03079457.2020.1754331	Infectious laryngotracheitis virus (IBV) in chickens (PhD Thesis)	Cell culture and protein characterization of IBV	
Next generation sequencing analysis of the within-host genetic diversity of Influenza A (H1N1) pdm09 viruses in the upper and lower respiratory tracts of patients with severe influenza. https://journals.asm.org/doi/full/10.1128/mSphere.01043-20	Study targets ICU-admitted patients with A(H1N1) pdm infection at in Vietnam	Real time PCR and NGS analysis	Viral RNA was extracted from respiratory samples using the QIAamp viral RNA mini kit (Qiagen, Hilden, Germany) or the MagMAX™ CORE nucleic acid purification kit according to the manufacturer's instructions.
First report of cystic echinococcosis in rhinos: A fertile infection of Echinococcus equinus in a Southern white rhinoceros (Ceratotherium simum simum) of Kruger National Park, South Africa. https://www.sciencedirect.com/science/article/pii/S2213224421000213	The first reported case of E granulosus s l in African rhinos		Protoscoleces from the inner germinal layer of hydatid cysts were extracted and stored in 70% ethanol. The sample was homogenized twice at 6800 rpm for 30 s followed by immediately cooling on ice. DNA was isolated using the MagMAX™ CORE Nucleic Acid Purification Kit (on the King Fisher™ Duo Prime Purification System from cysts (Protoscoleces from inner germinal layer).

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