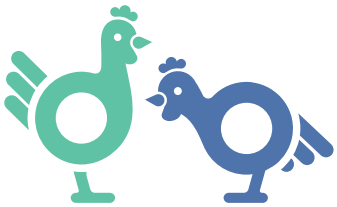
Poultry Veterinary Diagnostic Service



PORTFOLIO

Choosing Genovo is choosing the fast and simple way:

A We charge an all-inclusive fee for all processing steps around the (RT-) qPCR and sequencing services, including receipt, pooling, preparation and storage of your samples, administration and final reporting; also our expert's consulting related to your sample sets is included. So choose parameters, send in, lean back and enjoy.

B Our pricing structure for (RT-)qPCR is simple, transparent and easy to keep in mind.

C The (RT-)qPCR results may evoke your interest in going deeper? So choose Sanger or even Next Generation Sequencing (= NGS) services for most extensive scientific data. We also provide untargeted NGS for RNA to result in a huge but simple dataset that can be browsed conveniently. This »de novo« approach can be applied e.g. in unclear cases or for monitoring purposes.

D E We strive to be your one-stop solution. In addition to our biomolecular services, we also offer a wide range of solutions in bacteriology, serology, and other diagnostic fields.

By the way, did you notice the analogy between »de novo« and our name?

We are here for you:

If you have any questions, or before sending samples to us for the first time kindly contact us. You will find our contact data at
→ **www.genovo.de/contact/**

Send your sample sets to - Genovo GmbH, Kirchstrasse 3, 26197 Grossenkneten, Germany - , please make sure that the shipment is accompanied by our sample submission form or some equivalent.
→ **www.genovo.de/downloads/**

PORTFOLIO

SERVICES

A. Sample

Send us your sample for molecular biological analyzis and pay one lump sum per sample pool for any ordered service.
For you convenience we also provide sampling cards with FTA technology optimized for our services.

100001	all-inclusive sample processing fee, per sample or sample pool

B. (RT-)qPCR

Choose which pathogen you want to test for, price per sample or sample pool.

ITEM NO.	PATHOGEN
	Virus
100024	Adenovirus (FAdV)
100027	Astrovirus Chicken (CAstV)
100092	Astrovirus Turkey (TAstV-2)
100028	Chicken Anemia Virus (CAV)
100029	EDS-76/ Duck Adenovirus
100030	Encephalomyelitis Virus (AEV)
100097	Hemorrhagic Enteritis Virus of Turkeys (HEV)
100031	Herpesvirus of Turkey (HVT, screening for recombinant vaccines)
	construct-specific DIVA-qPCRs for rec. vacc.
100032	Infectious Bursal Disease Virus (IBDV) screening #
100161	IBDV genogroup A1
	IBDV genogroup A2
	IBDV genogroup A3
	IBDV genogroup A7
	IBDV genogroup B3
	IBDV genogroup A4
	IBDV genogroup A6
100025	Infectious Bronchitis Virus (IBV) screening #
100034	IBV variant Mass (GI-1)
	IBV variant Arkansas (GI-9)
	IBV variant D274 (GI-12)
	IBV variant 793b, 4/91, CR88, 1/96 (GI-13)
	IBV variant Q1 (GI-16)
	IBV variant QX (GI-19)
	IBV variant Italy02 (GI-21)
	IBV variant 02 (GI-23)
	IBV variants of GII (incl. D181 & D1466)
	IBV variants of GVIII (incl. IB80)
100035	Infectious Laryngotracheitis Virus (ILTV)
100036	Influenzavirus A (IVA) screening #
100115	IVA H5, H7, H9 (combination)
100039	IVA H9

100182	IVA H1
100183	IVA H6
100229	IVA N1
100230	IVA N2
100231	IVA N6
100232	IVA N8
	any other H- or N-type
100040	Leukosis Virus (exogenous ALV, RNA; screening PCR with sequencing)
100042	Marek's Disease Virus (MDV) screening #
100043	MDV DIVA Rispens
100044	Metapneumovirus Serotype A & B (aMPV, ART)
100045	Metapneumovirus Serotype C (aMPV, ART)
100046	Nephritis Virus 1 & 2 (ANV-1 & -2)
100190	Nephritis Virus 3 (ANV-3)
100047	Newcastle Disease Virus screening# (Orthoavulavirus javaense, NDV, PMV-1)
100048	PMV-1 pathotyping
100210	PMV-1 genotype I, II & VII (combination)
100112	PMV-3
100049	Poxvirus (FPV)
100050	Reovirus (av. Orthoreovirus; ARV)
100051	Reticuloendotheliosis Virus (REV)

	Bacteria
100073	Avibacterium paragallinarum
100052	thermophilic Campylobacter species (C. coli, C. jejuni, C. lari)
100053	Campylobacter hepaticus
100156	Enterococcus cecorum (Ecc) & cps0 virulence factor gene
100054	Mycoplasma MG / MS (combination) screening #
100055	MG DIVA 6/85 & F-strain
100056	MG DIVA ts-11
100057	MS DIVA MS-H
100128	Mycoplasma iowae (MI / Malacoplasma iowae)
100166	Mycoplasma meleagridis (MM)
100058	Ornithobacterium rhinotracheale (ORT)
100144	Pasteurella multocida
100026	Riemerella anatipestifer
100071	Salmonella spp. (without enrichment) screening #
100059	Salmonella spp. after enrichment (no processing fee applies) screening #
100060	Salmonella SE /ST (combination, serovar-specific)
100225	Salmonella SE DIVA (441/014 (ade-/his-); e.g. Ceva)
100100	Salmonella SE DIVA (Sm24/Rif12/Ssq strain; e.g. Elanco)
100101	Salmonella ST DIVA (Nal2/Rif9/Rtt strain; e.g. Elanco)
100103	Salmonella Gallinarum Pullorum, 9R DIVA

	Parasites
100094	Eimeria spp. screening #
100086	Eimeria maxima, E. tenella & E. acervulina (short life cycle)
100087	Eimeria maxima, E. brunetti & E. necatrix (long life cycle)
100249	Eimeria lata, E. nagambie & E. zaria (OTU x, y, z)
	Eimeria mitis & E. praecox
100061	Histomonas meleagridis (HM)

These screening PCRs are obligatory before any further typing PCRs because they are crucial for the further interpretation of typing results.
Our recommended procedure for routine diagnostics is screening - typing - sequencing.
If you are unsure about the recommended process in your case, please get in touch.

C. Sequencing

Choose Sanger or NGS sequencing of listed target genes or genomes, price per sample or sample pool. Both Sanger and NGS sequencing including extensive bioinformatic analysis and reporting.

ITEM NO.	PATHOGEN
	Sanger sequencing
100206	Avibacterium paragallinarum -
100072	ARV – partial sigma C gene
100040	ALV (exogenous ALV, RNA; screening PCR with Sanger sequencing)
100090	CAstV - partial Capsid protein gene
100207	CAV - partial VP1 gene
100070	FAdV – partial hexon gene
100095	Histomonas meleagridis (HM, for genotyping)
100062	IBDV - partial VP2 & VP1 genes
100064	IBV - partial S1 gene
100184/-5/-6	IBV - partial S1 gene (lineage-specific; on demand)
100106	Influenzavirus H5 (IVA H5) - HA gene
100107	Influenzavirus H9 (IVA H9) - HA gene
100069	MDV – partial meq1 gene
100137	MG - partial mgc2 gene
100138	MS - partial vlha gene
100091	aMPV - partial G gene
100067	PMV-1 - partial F-gene incl. cleavage site
100122	16S rRNA sequencing
	Next Generation Sequencing
100096	Bacterial isolate sequencing (NGS; additional bioinformatics see below)
100068	Untargeted full RNA (NGS, e.g. for monitoring) (per sample)
	for up to 7 samples
	for ≥ 8 samples
	Pathogen specific sequencing (NGS), e.g.
100063	IBDV - segment A & B (VP2 & VP1)
100065	IBV - full S1 gene
100066	IVA - full genome
	and others on request
100220	NGS custom bioinformatic analysis (e.g. comparison to other strains, epidemiological analysis, ...)

D. Serology*

Choose which ELISA, HIT or RSA you want us to run. For further kit products please inquire. By default, we do not pool any serum samples and do not recommend doing so. Price per individual serum and test.

100250	ELISA Encephalomyelits Virus (AEV) - BioChek
100003	ELISA Infectious Bronchitis Virus (IBV) - Idexx
100004	ELISA Infectious Bursal Disease Virus (IBDV) - BioChek
100192	ELISA Influenza Virus A (IVA) - BioChek
100193	ELISA Influenza Virus A H5 (IVA) - IDvet
100194	ELISA Influenza Virus A H7 (IVA) - IDvet
100195	ELISA Influenza Virus A H9 (IVA) - Idvet
100242	ELISA Metapneumovirus (ART) - BioChek
100226	ELISA Mycoplasma gallisepticum (MG) - BioChek
100252	ELISA Mycoplasma meleagridis (MM) - BioChek
100227	ELISA Mycoplasma synoviae (MS) - BioChek
100098	ELISA Newcastle Disease Virus (NDV) - BioChek
100253	ELISA Newcastle Disease Virus (NDV) F-protein - BioChek
100251	ELISA Ornithobacterium rhinotracheale (ORT) - Idexx
100005	ELISA Reovirus (av. Orthoreovirus; ARV) - BioChek
100228	HIT Egg Drop Syndrome Virus (EDS-76)
100105	HIT Newcastle Disease Virus (NDV, PMV-1)
100254	RSA Mycoplasma gallisepticum
100255	RSA Mycoplasma synoviae
100256	RSA Mycoplasma meleagridis
100257	RSA Salmonella Gallinarum Pullorum
	Further analyses or kits on demand

* No processing fee applies

E. Bacteriology*

Find a choice of our bacteriological methodology, for any further methods or parameters please inquire. Price per sample, where indicated including (pre-)enrichment.

100104	Bacteriological examination - cultivation
100116	Clostridium spp. - selective enrichment
100074	MALDI-TOF mass spectrometry (bacteria)
100167	MALDI-TOF mass spectrometry (moulds)
100109	Sensitivity testing - agar diffusion test (ADT)
100110	Sensitivity testing - minimal inhibition concentration (MIC)
100204	Salmonella – cultural detection after enrichment (followed by MALDI-tof (see above) in case of growth)
100203	Salmonella agglutination
100223	Salmonella Enteritidis (SE) - differentiation IDT-strain (cultural)
100224	Salmonella Typhimurium (ST) - differentiation IDT-strain (cultural)
	Storage of bacterial isolates
	Further analyses

* No processing fee applies

Further analyses, also for other livestock species, on request.
Please contact us for custom package pricing on larger projects.

PRODUCTS

For your convenience we also provide sampling cards with FTA technology, tubes optimized for our services and shipment, as well as air sampling products.

Item no.	Product
100260	G-Card (6 medium spots)
100260	G-Card (6 medium spots, package of 100 cards)
100093	G-Card (12 small spots)
100093	G-Card (12 small spots, package of 100 cards)
100084	G-Card NGS (1 large spot)
100139	G-safe tube (2ml)
100083	G-safe tube (3ml)
100085	G-safe tube (6ml)
100129	NGS Sampling Box (shipment of liquids)
100130	NGS Sampling Box (shipment of G-card NGS)
100202	Paper strips (100 strips)
A100006	AeroCollect® Sample Chambers (25pc)
A100007	AeroCollect® device

Didn't find what you were looking for? Get in touch! We're continuously updating our portfolio, so this document may not always be fully up to date.

Do you have your own lab?

Most of the above mentioned PCR kits we also provide commercially.
Have a look at our webshop at

→ **www.genovo-shop.de**