Resource Summary Report

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European Nucleotide Archive (ENA)

RRID:SCR_006515
Type: Tool

Proper Citation

European Nucleotide Archive (ENA) (RRID:SCR_006515)

Resource Information

URL: http://www.ebi.ac.uk/ena/

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Description: Public archive providing a comprehensive record of the world""s nucleotide sequencing information, covering raw sequencing data, sequence assembly information and functional annotation. All submitted data, once public, will be exchanged with the NCBI and DDBJ as part of the INSDC data exchange agreement. The European Nucleotide Archive (ENA) captures and presents information relating to experimental workflows that are based around nucleotide sequencing. A typical workflow includes the isolation and preparation of material for sequencing, a run of a sequencing machine in which sequencing data are produced and a subsequent bioinformatic analysis pipeline. ENA records this information in a data model that covers input information (sample, experimental setup, machine configuration), output machine data (sequence traces, reads and quality scores) and interpreted information (assembly, mapping, functional annotation). Data arrive at ENA from a variety of sources including submissions of raw data, assembled sequences and annotation from small-scale sequencing efforts, data provision from the major European sequencing centers and routine and comprehensive exchange with their partners in the International Nucleotide Sequence Database Collaboration (INSDC). Provision of nucleotide sequence data to ENA or its INSDC partners has become a central and mandatory step in the dissemination of research findings to the scientific community. ENA works with publishers of scientific literature and funding bodies to ensure compliance with these principles and to provide optimal submission systems and data access tools that work seamlessly with the published literature. ENA is made up of a number of distinct databases that includes the EMBL Nucleotide Sequence Database (Embl-Bank), the newly established Sequence Read Archive (SRA) and the Trace Archive. The main tool for downloading ENA data is the ENA Browser, which is available through REST URLs for easy programmatic use. All ENA data are available through the ENA Browser. Note: EMBL Nucleotide Sequence Database (EMBL-Bank) is entirely included within this resource.

Abbreviations: ENA

Synonyms: ENA, European Nucleotide Archive

Resource Type: data or information resource, service resource, data repository, database, storage service resource

Defining Citation: PMID:20972220

Keywords: analysis, bioinformatics, dna, nucleotide, sequencing, web service, rna, molecular biology, nucleotide sequence, protein, gene expression, gene, genome, biochemistry, molecular structure, metabolite, protein binding, chemogenomics, gold standard

Funding: EMBL ;
Wellcome Trust ;
European Union

Availability: Public, The community can contribute to this resource, Acknowledgement requested

Resource Name: European Nucleotide Archive (ENA)

Resource ID: SCR_006515

Alternate IDs: OMICS_01029, nif-0000-32981

Alternate URLs: http://www.ebi.ac.uk/embl/

Record Creation Time: 20220129T080236+0000

Record Last Update: 20250412T055101+0000

Ratings and Alerts

No rating or validation information has been found for European Nucleotide Archive (ENA).

No alerts have been found for European Nucleotide Archive (ENA).

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 1242 mentions in open access literature.

Listed below are recent publications. The full list is available at dkNET.

Freick M, et al. (2025) Trisomy 26 in a Holstein calf with disorders of sex development. Animal genetics, 56(1), e13489.

Juma MA, et al. (2025) Genomic detection of Panton-Valentine Leucocidins encoding genes, virulence factors and distribution of antiseptic resistance determinants among Methicillin-resistant S. aureus isolates from patients attending regional referral hospitals in Tanzania. BMC medical genomics, 18(1), 14.

He C, et al. (2025) Identification of a de novo missense variant in the BRI3BP gene in a Holstein calf with congenital cardiac malformation and carpus valgus. Animal genetics, 56(1), e13494.

Wong B, et al. (2024) Streamlining remote nanopore data access with slow5curl. GigaScience, 13.

Kim YH, et al. (2024) Integrative Multi-omics Analysis Reveals Different Metabolic Phenotypes Based on Molecular Characteristics in Thyroid Cancer. Clinical cancer research : an official journal of the American Association for Cancer Research, 30(4), 883.

Li X, et al. (2024) Leveraging existing 16S rRNA gene surveys to decipher microbial signatures and dysbiosis in cervical carcinogenesis. Scientific reports, 14(1), 11532.

Vasiljevs S, et al. (2024) The presence of cystic fibrosis-related diabetes modifies the sputum microbiome in cystic fibrosis disease. American journal of physiology. Lung cellular and molecular physiology, 326(2), L125.

Yuan D, et al. (2024) The European Nucleotide Archive in 2023. Nucleic acids research, 52(D1), D92.

Caggìa V, et al. (2024) Root-exuded specialized metabolites reduce arsenic toxicity in maize. Proceedings of the National Academy of Sciences of the United States of America, 121(13), e2314261121.

Blomberg J, et al. (2024) Pseudomonas syringae infectivity correlates to altered transcript and metabolite levels of Arabidopsis mediator mutants. Scientific reports, 14(1), 6771.

Xiao W, et al. (2024) Bacterial interactome disturbance in chronic obstructive pulmonary disease clinical stability and exacerbations. Respiratory research, 25(1), 173.

Park JS, et al. (2024) Development of a web-based high-throughput marker design program: CAPS (cleaved amplified polymorphic sequence) Maker. Plant methods, 20(1), 192.

Cuomo P, et al. (2024) Phage-resistance alters Lipid A reactogenicity: a new strategy for LPS-based conjugate vaccines against Salmonella Rissen. Frontiers in immunology, 15, 1450600.

Boilard A, et al. (2024) Ancient DNA and osteological analyses of a unique paleo-archive reveal Early Holocene faunal expansion into the Scandinavian Arctic. Science advances, 10(13), eadk3032.

Zhang C, et al. (2024) The microbial contribution to litter decomposition and plant growth. Environmental microbiology reports, 16(1), e13205.

Hsu SK, et al. (2024) Reproductive isolation arises during laboratory adaptation to a novel hot environment. Genome biology, 25(1), 141.

Pihelgas S, et al. (2024) The gut microbiota of healthy individuals remains resilient in response to the consumption of various dietary fibers. Scientific reports, 14(1), 22208.

Di Capua I, et al. (2024) Integrative approach to monitoring metazoan diversity and distribution in two Mediterranean coastal sites through morphology and organismal eDNA. Scientific reports, 14(1), 19291.

Ojosnegros S, et al. (2024) Transcriptomic analyses in the gametophytes of the apomictic fern Dryopteris affinis. Planta, 260(5), 111.

Pereira IT, et al. (2024) Cardiac Development Long Non-Coding RNA (CARDEL) Is Activated during Human Heart Development and Contributes to Cardiac Specification and Homeostasis. Cells, 13(12).