



# **Digital Di**versity Hub

hub.dsmz.de

# 

### Search in our Databases

The Hub lets you search directly in all of our renowned databases and guides you to the results.

### **Integrated Strain Profiles**

Within the Hub, all data for each bioresource of the DSMZ will be integrated, giving you all data in one place.

### **Knowledge Graph**

An interactive knowledge graph will let you explore the data and gives you novel insights into data relationsships.

### **Al-guided assistence**

Within the next years, the knowledge graph will be used to deploy artificial intelligence (e.g. LLMs) to answer user questions.

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### **Integrated Databases for** the Life Sciences



The DSMZ Digital Diversity provides a cohesive suite of scientific databases, developed to support the life sciences.



**Focus on Bioresources** 

The DSMZ has a strong expertise in collecting bioresources, such as bacteria, fungi and cell lines. This is also the focus of our databases.



**Novel Applications** 

We will develop the Digital Diversity platform into a comprehensive toolbox for microbiologists.



### Trait data on prokaryotic strains

The Bacterial Diversity database Bac*Dive* is the worldwide largest database for standardized bacterial phenotypic information, mobilized and integrated from diverse sources.



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bacdive.dsmz.de

silva

### **Ribosomal RNA and taxonomy**

SILVA provides comprehensive, quality checked and regularly updated datasets of aligned small (16S/18S) and large subunit (23S/28S) ribosomal RNA (rRNA) sequences for all three domains of life.

arb-silva.de

😚 StrainInfo

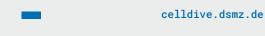
### **Microbial strain identifiers**

StrainInfo is a service to provide a resolution of microbial strain identifiers by storing culture collection numbers, their relations, and culture-associated data and providing persistent identifiers (e.g. DOIs).



### Tools and data for cell lines

DSMZCellDive helps with selecting suitable model cell lines by providing insights into gene expressions, authentication profiles, and more.





### **Trait data for phages**

Phage*Dive* is a specific database for bacteriophages and archaeal viruses. it gathers and links all the experimental data and metadata of the viruses present in different culture collections



phagedive.dsmz.de



### Genome-based prokaryote taxonomy

The Type Strain Genome Server is a user-friendly high-throughput web server for genome-based prokaryote taxonomy, providing digital DNA:DNA hybrization values, differences in G+C content and more.



## **BRENDA** Data on enzymes and metabolites

The BRENDA enzyme database is the world's most comprehensive enzyme information repository and offers a large palette of tools alongside manually annotated information on enzymes, metabolites and pathways.

brenda-enzymes.org



### Nomenclature and taxonomy

The List of Prokaryotic names with Standing in Nomenclature provides comprehensive information on the nomenclature of prokaryotes and more.

lpsn.dsmz.de



### Cultivation media and growth data

Media*Dive* is a manually curated collection of cultivation media and growth conditions, providing many digital tools to find, share and predict cultivation media.