

DSMZ – Leibniz Institute DSMZ – German Collection of Microorganisms and Cell Cultures, Braunschweig

[[About the Institution](#)] [[About the Data Center](#)] [[Data Center Profile](#)] [[Your contact persons at DSMZ](#)]

About the Institution

The [Leibniz Institute DSMZ - German Collection of Microorganisms and Cell Cultures](#), Braunschweig with [Database and IT-Department](#) is one of the largest biological resource centers worldwide. Its culture and tissue collections and DNA Bank currently comprise almost 40,000 items, including about 20,000 different bacterial and 5,000 fungal strains, 700 human and animal cell lines, 800 plant cell lines, 1,000 plant viruses and antisera, and 4,800 different types of bacterial genomic DNA.



Leibniz Institute

DSMZ-German Collection
of Microorganisms
and Cell Cultures GmbH

About the Data Center

The DSMZ data center focusses on providing organism-linked information covering the multifarious aspects of bacterial biodiversity.

Data archiving for research projects:

- Data accompanied by the deposit of a biological resource (bacterial or cell culture lines) within the DSMZ collections ([Deposit in the DSMZ](#))
- Data describing microbial diversity (e.g. taxonomic classification, morphology, physiology, cultivation, origin, natural habitat)



[Contact DSMZ at NFDI4Biodiversity](#)

Data Center Profile

Name	DSMZ – Leibniz Institute DSMZ – German Collection of Microorganisms and Cell Cultures, Braunschweig
URL	https://www.dsmz.de/

Description	Besides being a comprehensive bioresource center, DSMZ is as well a state-of-the-art research institute. More than 40 scientists, PhDs and postdoctoral fellows make us an active research collection. Research areas include the microbial ecology, diversity and phylogenesis, the mechanisms of microbial evolution. Furthermore, our research fields comprise bioinformatics, microbial cell biology, single cell genomics and infection research. Located at the DSMZ is BacDive - The Bacterial Diversity Metadatabase . BacDive focuses providing organism-linked information covering the multifarious aspects of bacterial biodiversity, e.g. taxonomic classification, morphology, physiology, cultivation, origin, natural habitat. BacDive offers the opportunity to publish datasets in an highly integrated database. The integration of additional data is a central objective of BacDive. Proposals for the integration of relevant collection descriptions are highly encouraged. In the medium term, data submissions and data flow via GFBio Data portal will be fully automated by integrated interfaces. We encourage to combine data submission to the DSMZ GFBio Data Center with the deposit of the biological resource: Available (Meta-)Data for strains deposited at the DSMZ open collection . The data is then curated in the DSMZ in house data management solution and published via BacDive interfaces to GFBio portal and associated data portals.			
	<p>Scientific data curation services (incl. taxonomic services)</p> <p>The Leibniz Institute DSMZ is an active research collection and covers various fields of research, e.g. microbial ecology and diversity research; for more information see research at DSMZ. The DSMZ has a long established and well-founded expertise in microbial research collection management, taxonomy. As a high quality taxonomic list DSMZ offers List of Prokaryotic names with Standing in Nomenclature (LPSN). LPSN provides comprehensive information on the nomenclature of prokaryotes and much more. As infrastructure facility the DSMZ maintains specific expertise and offers counseling in the areas.</p> <ul style="list-style-type: none">• collection management of microorganisms, plant cell lines and viruses, human and animal cell lines• microbial taxonomy, phylogeny and species description• standardization and quality assurance of bioresources• biosafety and biosecurity• legal framework for the exploitation of bioresources (Patenting, Convention of Biological Diversity, Access and Benefit Sharing) <p>Besides its function as an infrastructure facility, DSMZ maintains comprehensive expert knowledge in data driven aspects of microbiology, genomics, bioinformatics and biodiversity-orientated research. The Leibniz- Institute DSMZ is an active member of global bioresource center networks such as the World Federation for Culture Collections (WFCC) and publishes information on its biological resources for years via the Global Biodiversity Information Facility (GBIF), the DNA Bank Network, Global Genome Biodiversity Network (GGBN), via the Common Access to Biological Resources and Information (CABRI) portal or via contributions to the strain-associated catalogue of the StrainInfo bioportal. Within the GBIF Germany the DSMZ constitutes the GBIF-D node Bacteria & Archaea. The DSMZ hosts the coordination Office of Microbial Resource Research Infrastructure (MIRRI) and actively participates in several of its workpackages.</p>			
Data domains (scope)	As DSMZ data center we focus on providing organism-linked information covering the multifarious aspects of bacterial biodiversity.			
Target group				
Service Description	Data archiving for research projects is focusing on			
	Type 1	Data accompanied by the deposit of a biological resource within the DSMZ collections (Deposit in the DSMZ)		
	Type 2	Data describing microbial diversity (e.g. taxonomic classification, morphology, physiology, cultivation, origin, natural habitat), according to our profile description (DSMZ - extended profile, DSMZ)		
	<p>IT services</p> <p>Data submission and accession</p> <ul style="list-style-type: none">• BacDive - The Bacterial Diversity Metadatabase - custom data import of descriptions of culture collections, expert-compiled compendia, trait data. Additionally, we have implemented functionalities for individual data annotation in BacDive. This extension is currently in alpha release state and tested only in house.• DSMZ open collection - Combined deposition of biological resources and descriptive data <p>Data integration and management</p> <ul style="list-style-type: none">• Expertise and counseling in collection management of microorganisms, plant cell lines and viruses, human and animal cell lines <p>Data backup and archiving</p> <ul style="list-style-type: none">• Backup and archiving facilities of the Leibniz Institute DSMZ <p>Data publication</p> <ul style="list-style-type: none">• BacDive - The Bacterial Diversity Metadatabase• DSMZ data provider service via BioCAsE wrapper• DSMZ as GBIF Data publisher• DSMZ at the WFCC and WDCM <p>User services</p> <ul style="list-style-type: none">• Individual support, workshops and trainings on request and available capacities• BacDive User Helpdesk			
Service Levels	Data Set x	Data Package x	Data management x	Research Objects x
Data Formats				
Data Submission Formats	Data	Via DSMZ online accession form or spreadsheets (CSV), preferably standardized formats of any kind, MySQL Dumps Example templates for data submission can be found in the GFBio collection of recommended data submission templates		
	Metadata	EML, ABCD, DarwinCore, MCL		
Data Accessibility	Public access points	GFBio , BioCAsE Data Access Services at the DSMZ , GBIF , BacDive		
	Standardised exchange formats	XML-files in ABCD, DarwinCore, EML standard. Web services of the DSMZ accession platform and BacDive platform		
	Data formats	Text, CSV, XML		
	Long-term availability	Unlimited		
Data Publication Services	Data Citation	A citation is provided for all published data		
	DOI	A DOI is provided via GBIF		
Archiving (RAW-data ingest, data, media)				
Licenses / Terms of Use	Metadata			
	Data			

Documentation	
<p>Computing center, external service provider</p> <p>name of the associated computing center (s), (commercial) service provider (s) and services provided</p>	
Backup	

Your contact persons at DSMZ

Data curator

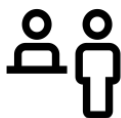
- [Christian Ebeling](#)

Technical contact

- [Christian Ebeling](#)

NFDI contact persons

- [Lorenz Reimer](#), [Christian Ebeling](#)



Do you have questions, feedback or need help?

[Contact our Helpdesk](#) for direct support.

