



Strain identifier

BacDive ID:	7152	DOI:	10.13145/bacdive7152.20190402.4
Type strain:	yes	Designation:	0-1
Culture col. no.:	DSM 1819, ATCC 27329, CIP 101128, IAM 12098, CCUG 55904, NCIMB 10815, LMG 2269, IFO 15690, JCM 2831		

Sections

- [Name and taxonomic classification](#)
- [Morphology and physiology](#)
- [Culture and growth conditions](#)
- [Isolation, sampling and environmental information](#)
- [Application and interaction](#)
- [Molecular biology](#)
- [Strain availability](#)
- [References](#)

Name and taxonomic classification

Ref.: 666	Domain	Bacteria
Ref.: 666	Phylum	Proteobacteria
Ref.: 666	Class	Alphaproteobacteria
Ref.: 666	Order	Rhizobiales
Ref.: 666	Family	Methylobacteriaceae
Ref.: 666	Genus	Methylobacterium
Ref.: 666	Species	Methylobacterium radiotolerans
Ref.: 666	Full Scientific Name	Methylobacterium radiotolerans (Ito and Iizuka 1971) Green and Bousfield 1983
Ref.: 666	Designation:	0-1
Ref.: 666	Type strain:	yes

Prokaryotic Nomenclature Up-to-date (PNU)

Ref.: 20215	Domain	Bacteria
Ref.: 20215	Phylum	Proteobacteria
Ref.: 20215	Class	Alphaproteobacteria
Ref.: 20215	Literature reference	Int. J. Syst. Evol. Microbiol. 56:1
Ref.: 20215	Family	Methylobacteriaceae
Ref.: 20215	Genus	Methylobacterium

Ref.: 20215	Taxonomical status	genus (AL)
Ref.: 20215	Literature reference	Int. J. Syst. Bacteriol. 30:225
Ref.: 20215	Species	Methylobacterium radiotolerans
Ref.: 20215	Taxonomical status	comb. nov. (VP)
Ref.: 20215	Literature reference	Int. J. Syst. Bacteriol. 33:875*
Ref.: 20215	Full Scientific Name	Methylobacterium radiotolerans corrig. (Ito and Iizuka 1971) Green and Bousfield 1983
Ref.: 20215	Synonym	Pseudomonas radiora
Ref.: 20215	Synonym	Methylobacterium radiora

Morphology and physiology

Ref.: 60784	Incubation period	2 days
Ref.: 666	Name of produced compound	bacteriochlorophyll
Ref.: 60784	Oxygen tolerance	aerobe

Culture and growth conditions

Ref.: 666	Culture medium	NUTRIENT AGAR (DSMZ Medium 1), 26°C, + 1% methanol
Ref.: 666	Culture medium growth	yes
Ref.: 666	Culture medium link	https://www.dsmz.de/microorganisms/medium/pdf/DSMZ_Medium1.pdf

	Temperatures	<table border="1"> <thead> <tr> <th>Kind of temperature</th> <th>Temperature</th> </tr> </thead> <tbody> <tr> <td>growth</td> <td>26 °C</td> </tr> <tr> <td>growth</td> <td>30 °C</td> </tr> </tbody> </table>	Kind of temperature	Temperature	growth	26 °C	growth	30 °C
Kind of temperature	Temperature							
growth	26 °C							
growth	30 °C							
Ref.: 666								
Ref.: 60784								

Ref.: 666	Temperature range	mesophilic
Ref.: 60784	Temperature range	mesophilic

Isolation, sampling and environmental information

Ref.: 666	Sample type/isolated from	japanese unhulled rice
Ref.: 60784	Sample type/isolated from	Rice grains, normal unpolished and commercial rice

Isolation sources categories

Cat1	Cat2	Cat3
#Host Body-Site	#Plant	#Fruit (Seed)

Application and interaction

Ref.: 666

Biosafety level

1 Risk group (German classification)

Molecular biology

	Sequence database	Sequence accession description	Sequence accession number	Sequence length(bp)	Associated NCBI tax ID	
Ref.: 20218	Marker Gene (GenBank Direct submission)	Methylobacterium radiotolerans strain ATCC 27329 PufM (pufM) gene, partial cds	DQ017883	196	426355	*
Ref.: 20218	Marker Gene (DDBJ Direct submission)	Methylobacterium radiotolerans gene for 16S ribosomal RNA, partial sequence, strain:DSM 1819	AB175640	1433	426355	*
Ref.: 20218	Marker Gene (GenBank Direct submission)	Methylobacterium radiotolerans JCM 2831 gyrB gene, partial sequence	EU430414	1193	426355	*
Ref.: 20218	Marker Gene (GenBank Direct submission)	Methylobacterium radiotolerans strain 0-1 methanol dehydrogenase alpha subunit (mxαF) gene, partial cds	FJ157954	517	31998	*
Ref.: 20218	Marker Gene (DDBJ Direct submission)	Methylobacterium radiotolerans gene for 16S ribosomal RNA, partial sequence, strain:IAM 12098	AB175641	1433	426355	*
Ref.: 20218	Marker Gene (DDBJ Direct submission)	Methylobacterium radiotolerans gyrB gene for gyrase B, partial cds, strain: IAM 12098	AB302910	1197	426355	*
Ref.: 20218	Marker Gene (EMBL Direct submission)	Methylobacterium radiotolerans partial 16S rRNA gene, strain IAM 12098	AJ400911	667	426355	*
Ref.: 20218	GenBank Genome project data	Methylobacterium radiotolerans JCM 2831, complete genome	CP001001	6077833	426355	*
Ref.: 20218	GenBank Genome project data	Methylobacterium radiotolerans JCM 2831 plasmid pMRAD01, complete sequence	CP001002	586164	426355	*



Methylobacterium radiotolerans

Ref.: 20218	GenBank Genome project data	Methylobacterium radiotolerans JCM 2831 plasmid pMRAD02, complete sequence	CP001003	47003	426355	*
Ref.: 20218	GenBank Genome project data	Methylobacterium radiotolerans JCM 2831 plasmid pMRAD03, complete sequence	CP001004	42985	426355	*
Ref.: 20218	GenBank Genome project data	Methylobacterium radiotolerans JCM 2831 plasmid pMRAD04, complete sequence	CP001005	37743	426355	*
Ref.: 20218	GenBank Genome project data	Methylobacterium radiotolerans JCM 2831 plasmid pMRAD05, complete sequence	CP001006	36410	426355	*
Ref.: 20218	GenBank Genome project data	Methylobacterium radiotolerans JCM 2831 plasmid pMRAD06, complete sequence	CP001007	27836	426355	*
Ref.: 20218	GenBank Genome project data	Methylobacterium radiotolerans JCM 2831 plasmid pMRAD07, complete sequence	CP001008	22114	426355	*
Ref.: 20218	GenBank Genome project data	Methylobacterium radiotolerans JCM 2831 plasmid pMRAD08, complete sequence	CP001009	21022	426355	*
Ref.: 20218	Marker Gene (DDBJ Direct submission)	Methylobacterium radiotolerans gene for 16S rRNA, strain: JCM 2831	D32227	1400	426355	*
Ref.: 20218	Marker Gene (GenBank Direct submission)	Methylobacterium radiotolerans JCM 2831 strain DSM 1819 methanol dehydrogenase alpha subunit-like (mxaF) gene, partial sequence	EF562472	553	426355	*
Ref.: 20218	Marker Gene (EMBL Direct submission)	TPA: Methylobacterium radiotolerans JCM 2831 transfer-messenger mRNA Methy_radio_JCM283.1, two-piece tmRNA, Acceptor RNA	HG790226	84	426355	*
Ref.: 20218	Marker Gene (EMBL Direct submission)	TPA: Methylobacterium radiotolerans JCM 2831 transfer-messenger mRNA Methy_radio_JCM283.1, two-piece tmRNA, Coding RNA	HG790227	208	426355	*



Methylobacterium radiotolerans

Ref.: 20218	Marker Gene (EMBL Direct submission)	TPA: Methylobacterium radiotolerans JCM 2831 transfer-messenger mRNA Methy_radio_JCM283.2, two-piece tmRNA, Acceptor RNA	HG790350	92	426355	*
Ref.: 20218	Marker Gene (EMBL Direct submission)	TPA: Methylobacterium radiotolerans JCM 2831 transfer-messenger mRNA Methy_radio_JCM283.2, two-piece tmRNA, Coding RNA	HG790351	231	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Ala-CGC-1-1 gene	LK010557	76	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Ala-GGC-1-1 gene	LK010558	76	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Ala-GGC-1-2 gene	LK010559	76	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Ala-TGC-1-1 gene	LK010560	76	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Ala-TGC-1-2 gene	LK010561	76	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Ala-TGC-2-1 gene	LK010562	76	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Ala-TGC-2-2 gene	LK010563	76	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Arg-ACG-1-1 gene	LK010564	77	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Arg-CCG-1-1 gene	LK010565	77	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Arg-TCT-1-1 gene	LK010566	77	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Asn-GTT-1-1 gene	LK010567	76	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Cys-GCA-1-1 gene	LK010569	74	426355	*



Methylobacterium radiotolerans

Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Gln-CTG-1-1 gene	LK010570	74	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Gln-TTG-1-1 gene	LK010571	75	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Glu-CTC-1-1 gene	LK010572	76	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Glu-TTC-1-1 gene	LK010573	76	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Gly-GCC-1-1 gene	LK010575	75	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Gly-TCC-1-1 gene	LK010576	74	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Gly-TCC-2-1 gene	LK010577	78	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-His-GTG-1-1 gene	LK010578	77	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Ile-GAT-1-1 gene	LK010579	77	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Ile-GAT-1-2 gene	LK010580	77	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Ile-GAT-1-3 gene	LK010581	77	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Ile-GAT-1-4 gene	LK010582	77	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Leu-CAA-1-1 gene	LK010583	85	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Leu-CAG-1-1 gene	LK010584	85	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Leu-GAG-1-1 gene	LK010585	85	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Leu-TAA-1-1 gene	LK010586	87	426355	*



Methylobacterium radiotolerans

Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Leu-TAG-1-1 gene	LK010587	85	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Lys-CTT-1-1 gene	LK010588	76	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Lys-CTT-2-1 gene	LK010589	84	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Lys-TTT-1-1 gene	LK010590	76	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Met-CAT-1-1 gene	LK010591	76	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Met-CAT-1-2 gene	LK010592	76	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Met-CAT-1-3 gene	LK010593	76	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Met-CAT-2-1 gene	LK010594	77	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Met-CAT-3-1 gene	LK010595	76	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Phe-GAA-1-1 gene	LK010596	76	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Pro-CGG-1-1 gene	LK010597	77	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Pro-GGG-1-1 gene	LK010598	78	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Pro-TGG-1-1 gene	LK010599	77	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-SeC-TCA-1-1 gene	LK010600	89	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Ser-CGA-1-1 gene	LK010601	90	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Ser-GCT-1-1 gene	LK010602	92	426355	*



Methylobacterium radiotolerans

Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Ser-GGA-1-1 gene	LK010603	90	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Ser-TGA-1-1 gene	LK010604	90	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Thr-CGT-1-1 gene	LK010605	76	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Thr-GGT-1-1 gene	LK010606	75	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Thr-TGT-1-1 gene	LK010607	75	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Trp-CCA-1-1 gene	LK010608	77	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Tyr-GTA-1-1 gene	LK010609	82	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Val-CAC-1-1 gene	LK010610	75	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Val-GAC-1-1 gene	LK010611	75	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-Val-TAC-1-1 gene	LK010612	76	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-iMet-CAT-1-1 gene	LK010613	77	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-iMet-CAT-1-2 gene	LK010614	77	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-iMet-CAT-1-3 gene	LK010615	77	426355	*
Ref.: 20218	INSDC Sequence	TPA: Methylobacterium radiotolerans JCM 2831 tRNA-iMet-CAT-1-4 gene	LK010616	77	426355	*

Strain availability

Ref.: 666

Culture collection no.

DSM 1819, ATCC 27329, CIP 101128, IAM 12098, CCUG 55904, NCIMB 10815, LMG 2269, IFO 15690, JCM 2831



Ref.: 666 **Strain history** <- IAM <- H. Iizuka, 0-1

Associated Passport(s) in StrainInfo

- Ref.: 20218 52794 - <http://www.straininfo.net/strains/52794>
- Ref.: 20218 52793 - <http://www.straininfo.net/strains/52793>
- Ref.: 20218 152647 - <http://www.straininfo.net/strains/152647>
- Ref.: 20218 52795 - <http://www.straininfo.net/strains/52795>

References

- Ref.: 666 Leibniz Institut DSMZ-Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH; Curators of the DSMZ; DSM 1819
- Ref.: 20215 D.Gleim, M.Kracht, N.Weiss et. al.: Prokaryotic Nomenclature Up-to-date - compilation of all names of Bacteria and Archaea, validly published according to the Bacteriological Code since 1. Jan. 1980, and validly published nomenclatural changes since.
- Ref.: 20218 Verslyppe, B., De Smet, W., De Baets, B., De Vos, P., Dawyndt P. StrainInfo introduces electronic passports for microorganisms.. Syst Appl Microbiol. 37: 42-50 2014 (10.1016/j.syapm.2013.11.002, 24321274)
- Ref.: 60784 Culture Collection University of Gothenburg (CCUG); Curators of the CCUG; CCUG 55904

*** These References are textmined**

[back to top](#)