

Compendium of Actinobacteria from Dr. Joachim M. Wink
University of Braunschweig

Strain		DSM 42043
Genus		<i>Streptomyces</i>
Species		<i>sp.</i>
Status		
Risk group		1 (provisional classification by DSMZ)
Type strain		CGMCC 4.7007, SCSIO 02100
Genbank accession numbers		16S rRNA gene: JN389519
Reference		
Author		Tian, X. P., Xu, Y., Zhang, J., Li, J., Chen, Z., Kim, C. J., Li, W. J., Zhang, C. S., Zhang, S.
Title		<i>Streptomyces oceani</i> sp. nov., a new obligate marine actinomycete isolated from a deep-sea sample of seep authigenic carbonate nodule in South China Sea
Journal		<i>Antonie van Leeuwenhoek</i>
Volume		102 (2)
Page		335-343
Year		2012
Morphology		
Agar	ISP 2 - growth/G	good
Agar	ISP 2 - colony color/R	light ivory (1015)
Agar	ISP 2 - aerial mycelium/A	none
Agar	ISP 2 - soluble pigment/S	none
Agar	ISP 3 - G	sparse
Agar	ISP 3 - R	oyster white (1013)
Agar	ISP 3 - A	none
Agar	ISP 3 - S	none
Agar	ISP 4 - G	good
Agar	ISP 4 - R	ivory (1014), beige red (3012)
Agar	ISP 4 - A	none
Agar	ISP 4 - S	none
Agar	ISP 5 - G	sparse
Agar	ISP 5 - R	light ivory 81015)
Agar	ISP 5 - A	none
Agar	ISP 5 - S	none
Agar	ISP 6 - G	good
Agar	ISP 6 - R	ivory (1014), light ivory (1015)
Agar	ISP 6 - A	none
Agar	ISP 6 - S	none
Agar	ISP 7 - G	good
Agar	ISP 7 - R	ivory (1014)
Agar	ISP 7 - A	none

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Agar	ISP 7 - S	none
Agar	suter with tyrosine - G	good
Agar	suter with tyrosine - R	beige (1001)
Agar	suter with tyrosine - A	none
Agar	suter with tyrosine - S	sand yellow (1002)
Agar	suter without tyrosine - G	good
Agar	suter without tyrosine - R	ivory (1014)
Agar	suter without tyrosine - A	none
Agar	suter without tyrosine - S	none
	Sporechains/Sporangia	
Physiology		
Melanin		-
pH	range	
pH	optimum	
temperature	range	
temperature	optimum	
sodium chloride tolerance		7,5%
lysozyme tolerance		
use of carbohydrates	glucose	+
use of carbohydrates	arabinose	-
use of carbohydrates	sucrose	-
use of carbohydrates	xylose	+
use of carbohydrates	inositol	(+)
use of carbohydrates	mannose	(+)
use of carbohydrates	fructose	(+)
use of carbohydrates	rhamnose	-
use of carbohydrates	raffinose	-
use of carbohydrates	cellulose	-
Api zym	Phosphatase alkaline	5
Api zym	Esterase (C4)	1
Api zym	Esterase Lipase (C8)	2
Api zym	Lipase (C14)	0
Api zym	Leucin arylamidase	5
Api zym	Valine arylamidase	2
Api zym	Cystine arylamidase	0
Api zym	Trypsin	0
Api zym	Chymotrypsin	1
Api zym	Phosphatase acid	5
Api zym	Naphtol-AS-BI-phosphohydrolase	5
Api zym	alpha galactosidase	2
Api zym	beta galactosidase	4
Api zym	beta glucuronidase	0
Api zym	alpha glucosidase	3
Api zym	beta glucosidase	5

Api zym	N-acetyl-beta-glucoseamidase	5
Api zym	alpha mannosidase	2
Api zym	alpha fucosidase	0
Api coryne	nitrate reduction	-
Api coryne	Pyrazinamidase	-
Api coryne	Pyrrolidonyl arylamidase	-
Api coryne	Alkaline phosphatase	+
Api coryne	beta glucuronidase	-
Api coryne	beta galactosidase	-
Api coryne	alpha glucosidase	-
Api coryne	N-acetyl -beta glucoseamidase	+
Api coryne	Esculin (beta glucosidase)	-
Api coryne	Urease	-
Api coryne	Gelatine(hydrolysis)	+
Api coryne	Glucose fermentation	-
Api coryne	Ribose fermentation	-
Api coryne	Xylose fermentation	-
Api coryne	Mannitol fermentation	-
Api coryne	Maltose fermentation	-
Api coryne	Lactose fermentation	-
Api coryne	Sucrose fermentation	-
Api coryne	Glycogen fermentation	-

Apicoryne



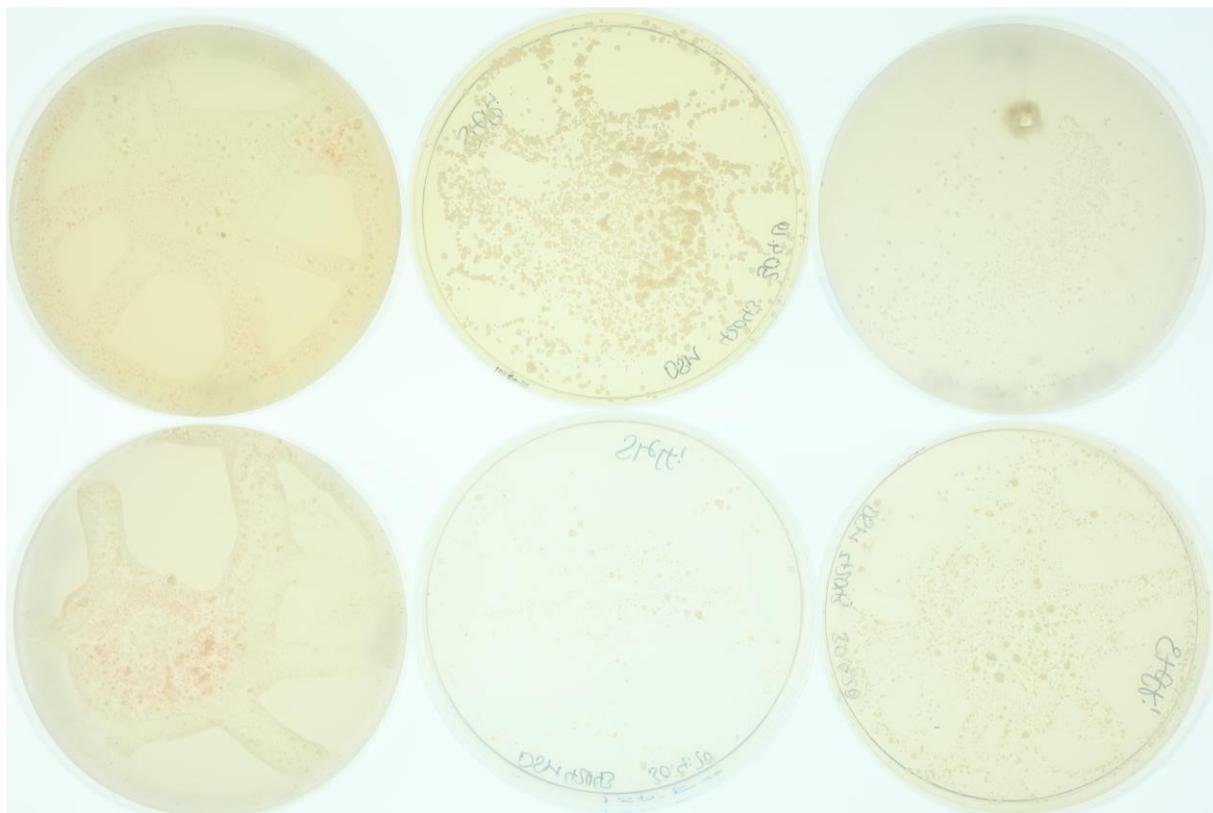
Abbildung 1: Apicoryne-Teststreifen mit Keim DSM 42043.

Apizym

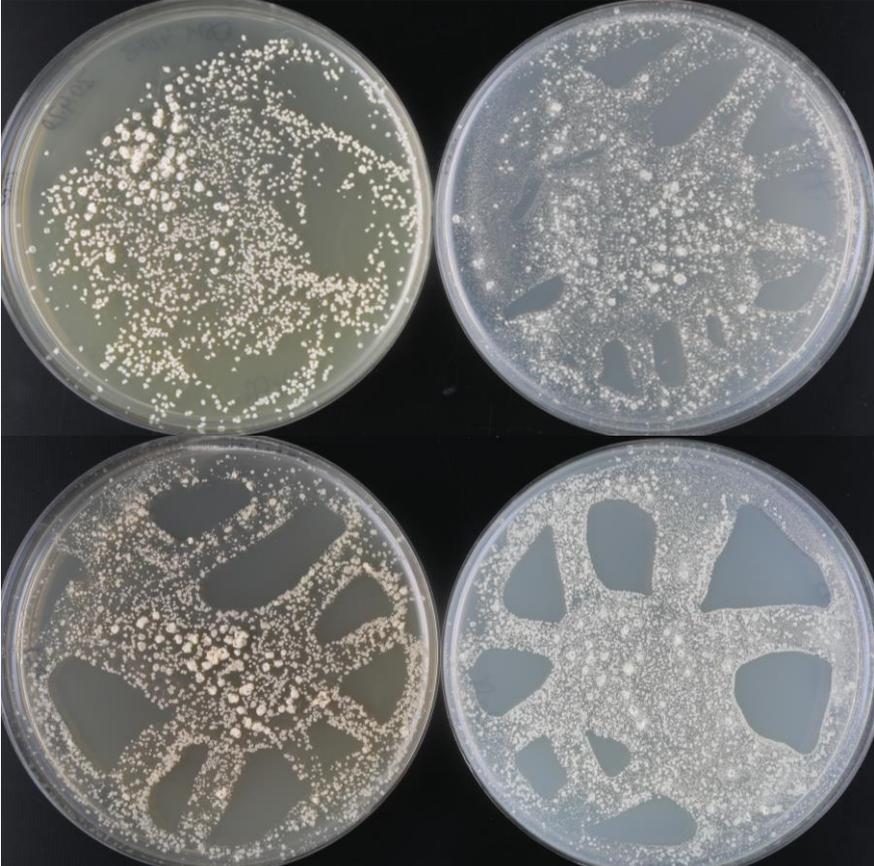


Abbildung 2: Apizym-Teststreifen mit Keim DSM 42043.

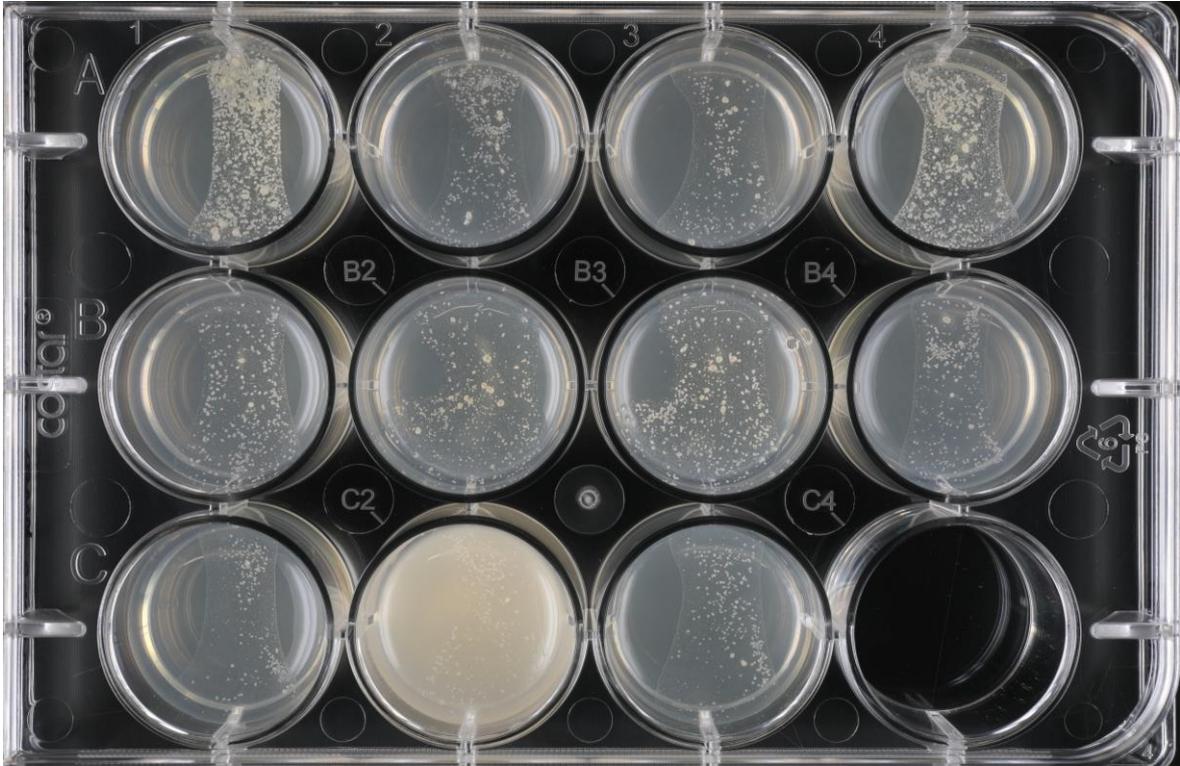
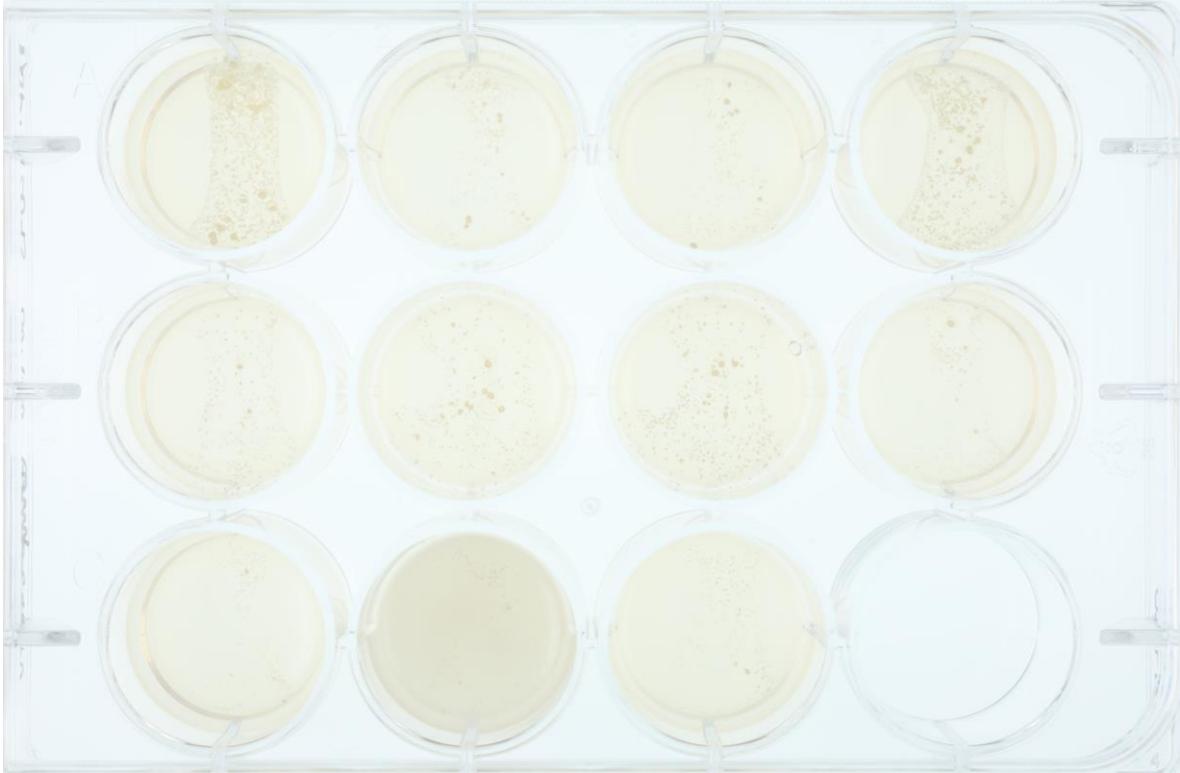
Plates (65, ISP2, ISP3, ISP4, ISP5, ISP7)



(ISP6, ISP7, SSM+T, SSM-T)



Carbon utilization test (from top left to bottom right: glucose, arabinose, sucrose, xylose, inositol, mannose, fructose, rhamnose, raffinose, cellulose)



**Sodium chloride tolerance test (from top left to bottom right: 0%, 2,5%, 5%,
7,5%, 10%)**

