

Compendium of Actinobacteria from Dr. Joachim M. Wink  
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Strain		DSM 42065
Genus		<b><i>Streptomyces</i></b>
Species		<b><i>atacamensis</i></b>
Status		
Risk group		L1
Type strain		CGMCC 4.7018, KACC 15492, C60
Reference		
Author		Santhanam, R., Okoro, C. K., Rong, X., Huang, Y., Bull, A. T., Weon, H. Y., Andrews, B. A., Asenjo, J. A., Goodfellow, M
Title		<i>Streptomyces atacamensis</i> sp. nov., isolated from an extreme hyper-arid soil of the Atacama Desert, Chile
Journal		<i>Int J Syst Evol Microbiol</i>
Volume		<b>62</b>
Page		2680-4
Year		2012
Morphology		
Agar	ISP 2 - growth/G	Sparse- good
Agar	ISP 2 - colony color/R	Colourless
Agar	ISP 2 - aerial mycelium/A	Sparse
Agar	ISP 2 - soluble pigment/S	None
Agar	ISP 3 - G	Good
Agar	ISP 3 - R	Lemon yellow (1012)
Agar	ISP 3 - A	Sparse
Agar	ISP 3 - S	None
Agar	ISP 4 - G	Good
Agar	ISP 4 - R	n.d.
Agar	ISP 4 - A	Silk grey (7044)
Agar	ISP 4 - S	None
Agar	ISP 5 - G	Sparse
Agar	ISP 5 - R	Lemon yellow (1012)
Agar	ISP 5 - A	None
Agar	ISP 5 - S	None
Agar	ISP 6 - G	Sparse
Agar	ISP 6 - R	Colourless
Agar	ISP 6 - A	None
Agar	ISP 6 - S	None
Agar	ISP 7 - G	Sparse
Agar	ISP 7 - R	Ivory (1014)
Agar	ISP 7 - A	None
Agar	ISP 7 - S	None
Agar	suter with tyrosine - G	Sparse- good

Compendium of Actinobacteria from Dr. Joachim M. Wink  
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Agar	suter with tyrosine - R	Sand yellow (1002)
Agar	suter with tyrosine - A	Traffic white (9016), grey white (9002)
Agar	suter with tyrosine - S	None
Agar	suter without tyrosine - G	Good
Agar	suter without tyrosine - R	Honey yellow (1005)
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		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 alcaline	4
Api zym	Esterase (C4)	2
Api zym	Esterase Lipase (C8)	3
Api zym	Lipase (C14)	0
Api zym	Leucin arylamidase	5
Api zym	Valine arylamidase	3
Api zym	Cystine arylamidase	1
Api zym	Trypsin	0
Api zym	Chymotrypsin	0
Api zym	Phosphatase acid	3
Api zym	Naphtol-AS-BI-phosphohydrolase	5
Api zym	alpha galactosidase	0
Api zym	beta galactosidase	0
Api zym	beta glucuronidase	0
Api zym	alpha glucosidase	2
Api zym	beta GLUCOSIDASE	0
Api zym	N-acetyl-beta-glucoseamidase	0
Api zym	alpha mannosidase	0

Compendium of Actinobacteria from Dr. Joachim M. Wink  
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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	(+)
Metabolites		
Antimicrobial	Staphylococcus aureus	
Antimicrobial	Escherichia coli	
Antimicrobial	Micrococcus luteus	
Antimicrobial	Pseudomonas aeruginosa	
Antimicrobial	Streptomyces murinus	
Antimicrobial	Bacillus subtilis	
Antimicrobial	Candida albicans	
Antimicrobial	Saccharomyces cerevisiae	
Antimicrobial	Aspergillus niger	

### Apicoryne



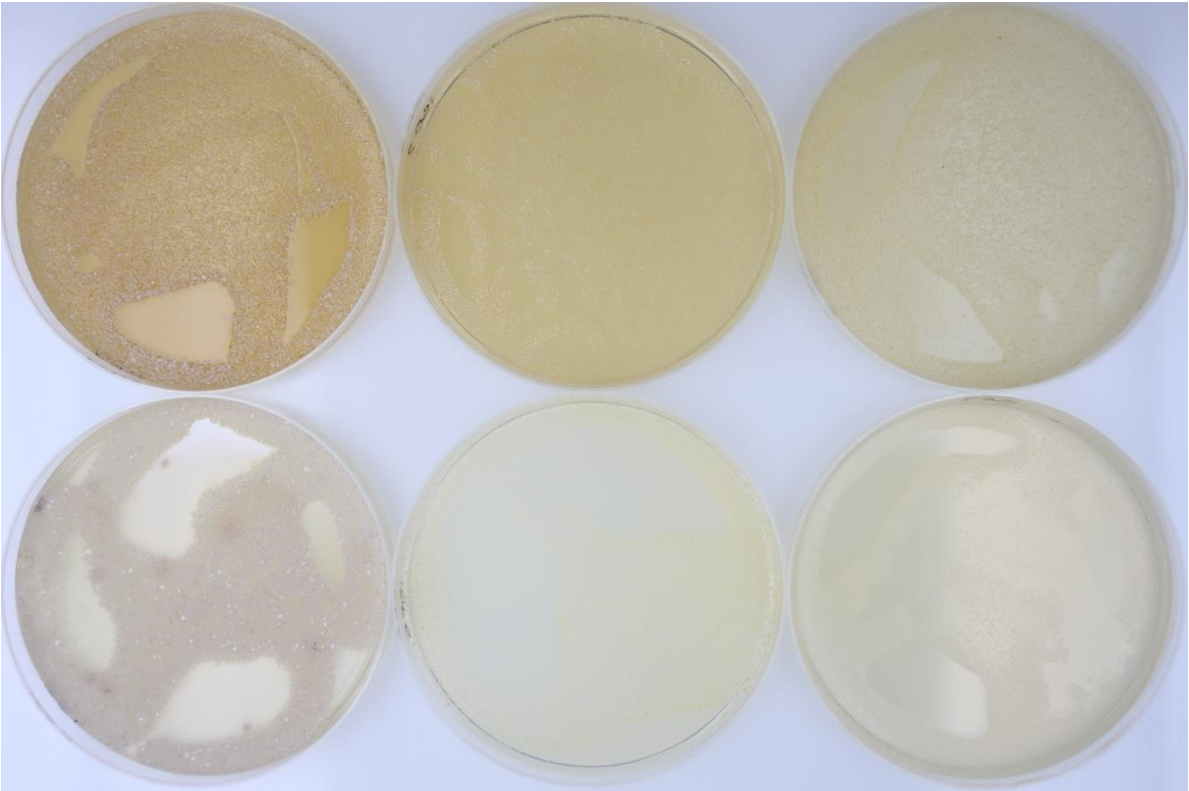
Abbildung 1: Apicoryne-Teststreifen mit Keim DSM.

### Apizym

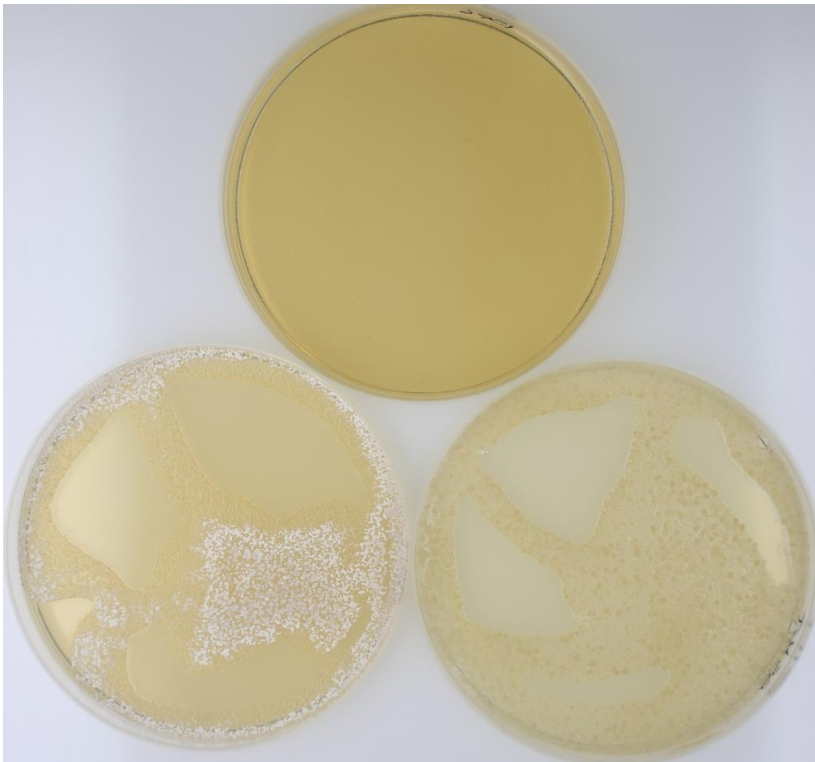


Abbildung 2: Apizym-Teststreifen mit Keim DSM.

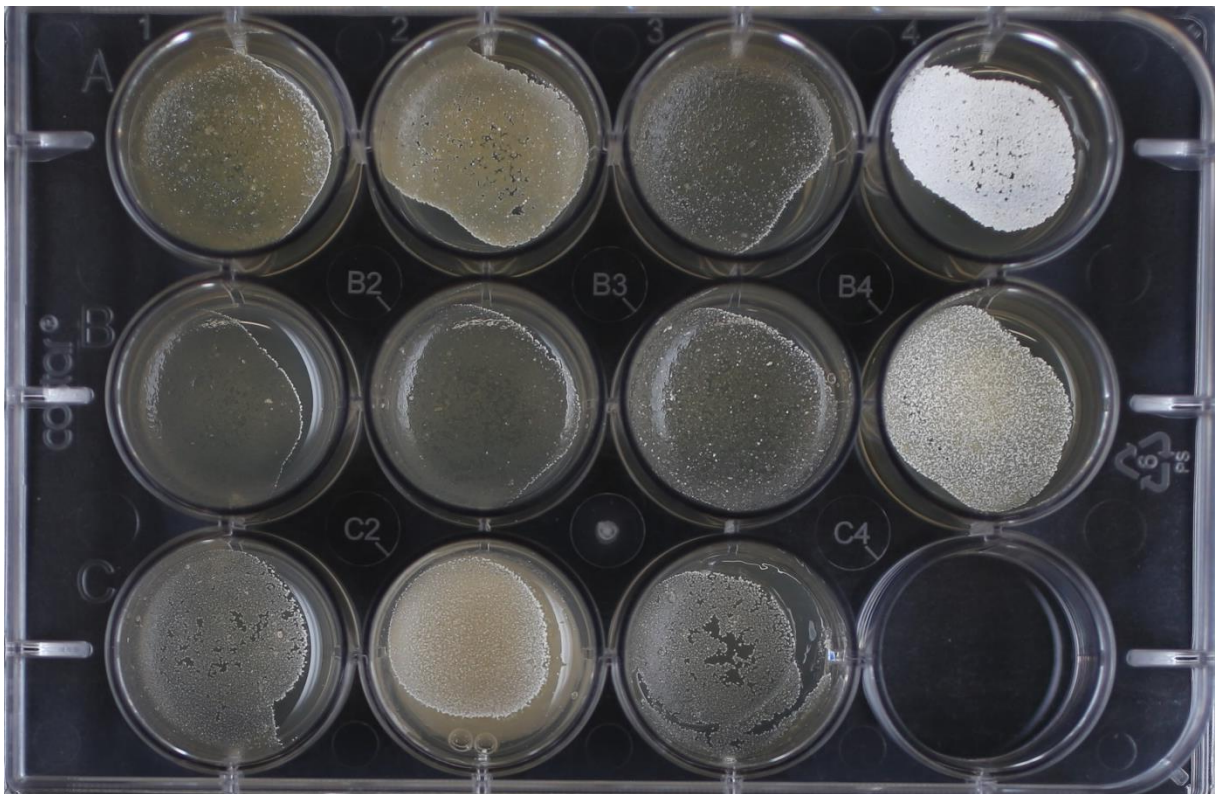
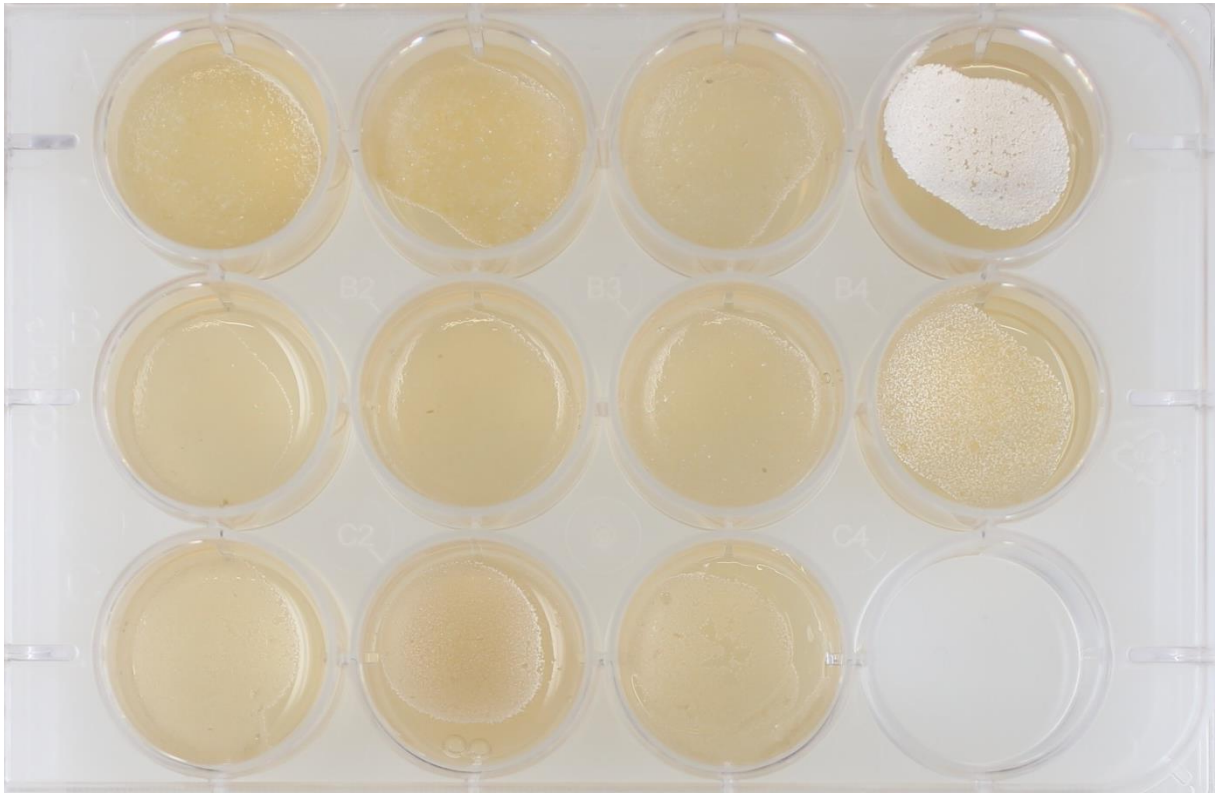
**Plates** (65, ISP2, ISP3, ISP4, ISP5, ISP7)



(ISP6, 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%)**

