Strain		DSM 42045
Genus		*Streptomyces*
Species		*caeruleatus*
Status		
Risk group		L1
Type strain		GIMN4.002, CCTCC M 208213, NRRL B-24802
Reference		
Author		Zhu, H. H., Guo, J., Yao, Q., Yang, S. Z., Deng, M. R., Li, T. H.
Title		*Streptomyces caeruleatus* sp. nov., with dark blue diffusible pigment.
Journal		*Int J Syst Evol Microbiol*
Volume		**61** (Pt 3)
Page		507-511
Year		2011
Morphology		
Agar	ISP 2 - growth/G	good
Agar	ISP 2 - colony color/R	grey blue (5008)
Agar	ISP 2 - aerial mycelium/A	signal white (9003)
Agar	ISP 2 - soluble pigment/S	green brown (8000)
Agar	ISP 3 - G	good
Agar	ISP 3 - R	purple violet (4007)
Agar	ISP 3 - A	pastel violet (4009)
Agar	ISP 3 - S	beige (1001)
Agar	ISP 4 - G	good
Agar	ISP 4 - R	ocean blue (5020)
Agar	ISP 4 - A	signal white (9003)
Agar	ISP 4 - S	olive grey (7002)
Agar	ISP 5 - G	good
Agar	ISP 5 - R	saphire blue (5003)
Agar	ISP 5 - A	light grey (7035)
Agar	ISP 5 - S	none
Agar	ISP 6 - G	/
Agar	ISP 6 - R	/
Agar	ISP 6 - A	/
Agar	ISP 6 - S	/
Agar	ISP 7 - G	good
Agar	ISP 7 - R	brown grey (7013)
Agar	ISP 7 - A	none
Agar	ISP 7 - S	none
Agar	suter with tyrosine - G	good
Agar	suter with tyrosine - R	black brown (8022)
Agar	suter with tyrosine - A	none
Agar	suter with tyrosine - S	olive brown (8008)

Agar	suter without tyrosine - G	decreased
Agar	suter without tyrosine - R	ochre yellow (1024)
Agar	suter without tyrosine - A	none
Agar	suter without tyrosine - S	none
	Sporechains/Sporangia	
Physiology		
Melanin		+
pH	range	
pH	optimum	
temperature	range	
temperature	optimume	
sodium chloride tolerance		2,5%
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	5
Api zym	Esterase (C4)	1
Api zym	Esterase Lipase (C8)	0
Api zym	Lipase (C14)	0
Api zym	Leucin arylamidase	5
Api zym	Valine arylamidase	2
Api zym	Cystine arylamidase	1
Api zym	Trypsin	4
Api zym	Chymotrypsin	0
Api zym	Phosphatase acid	5
Api zym	Naphtol-AS-BI-phosphohydrolase	4
Api zym	alpha galactosidase	0
Api zym	beta galactosidase	0
Api zym	beta glucuronidase	0
Api zym	alpha glucosidase	0
Api zym	beta glucosidase	0
Api zym	N-acetyl-beta-glucoseamidase	3
Api zym	alpha mannosidase	0
Api zym	alpha fucosidase	0
Api coryne	nitrate reduction	-
Api coryne	Pyraziamidase	-

| 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 42045.

Apizym

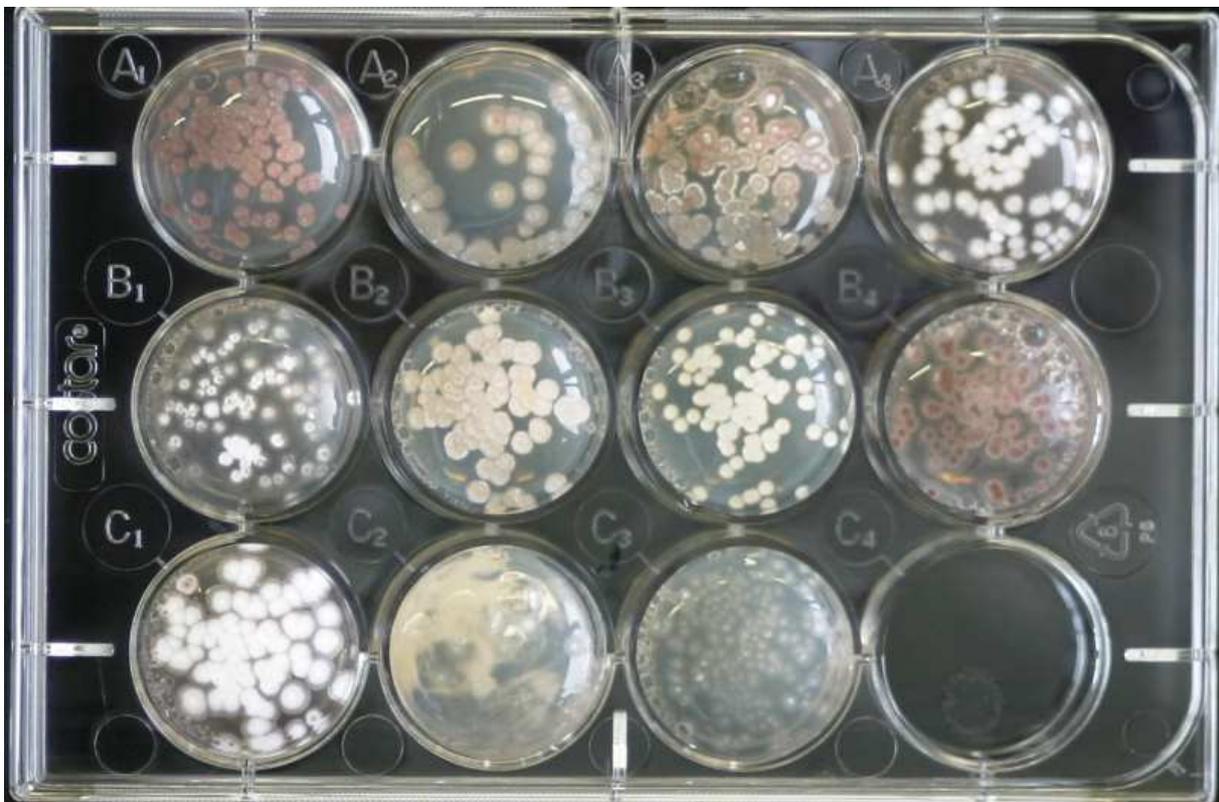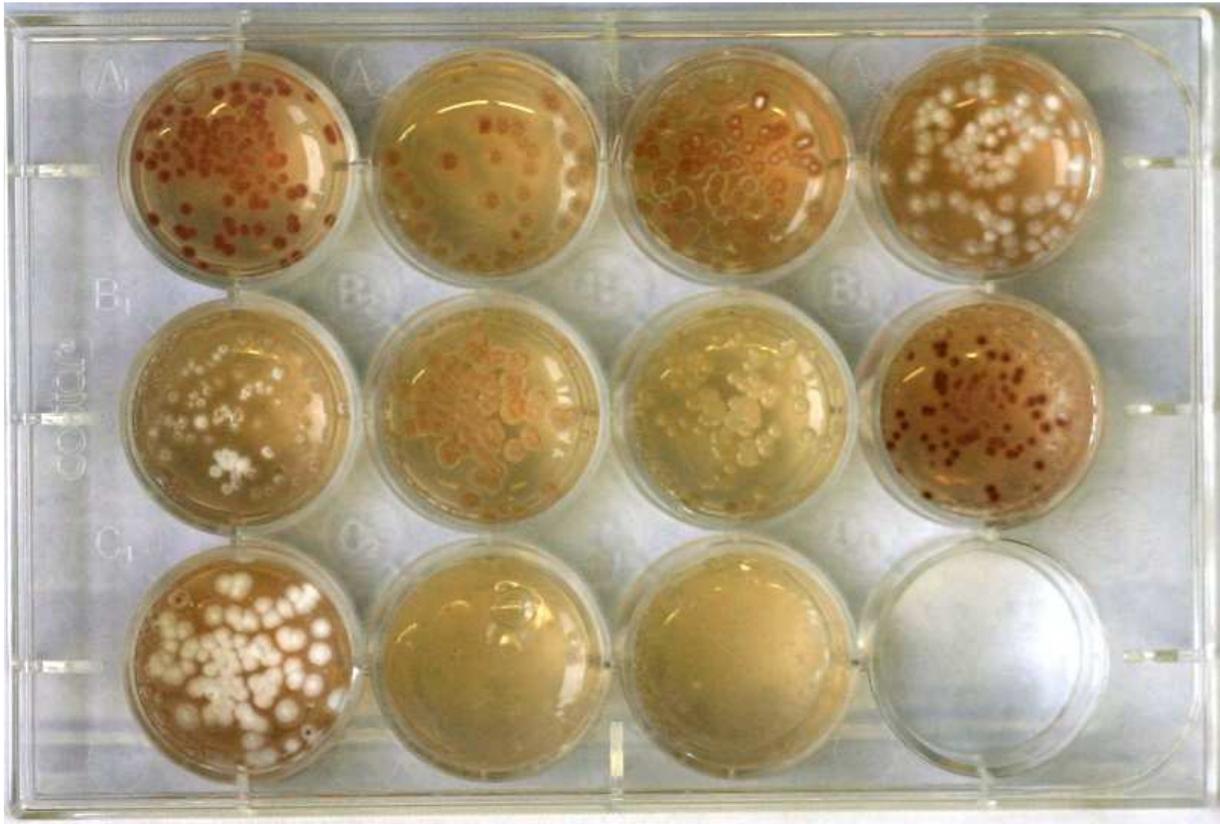Abbildung 2: Apizym-Teststreifen mit Keim DSM 42045.

Plates (65, ISP2, ISP3, ISP4, ISP5, ISP7)
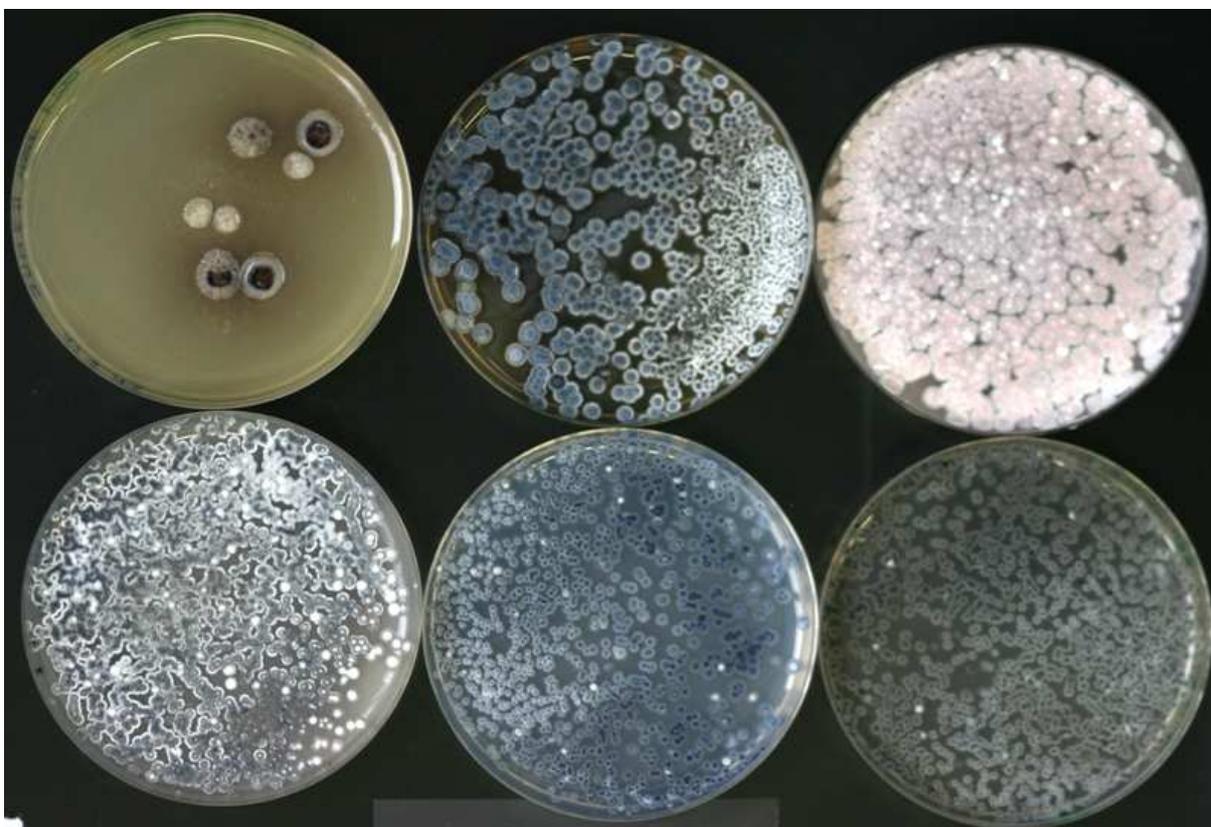
(SSM+T, SSM-T)

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%)