

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

Strain		DSM 45539
Genus		<i>Nocardia</i>
Species		<i>amikacinitolerans</i>
Status		
Risk group		L2
Type strain		CCUG 59655, W9988
Genbank accession numbers		16S rRNA gene: GU985442 <i>gyrB</i> gene: HM444071
Reference		
Author		Ezeoke, I., Klenk, H. P., Pötter, G., Schumann, P., Moser, B. D., Lasker, B. A., Nicholson, A., Brown, J. M.
Title		<i>Nocardia amikacinitolerans</i> sp. nov., an amikacin-resistant human pathogen
Journal		<i>Int J Syst Evol Microbiol</i>
Volume		63 (Pt3)
Page		1056-61
Year		2013
Morphology		
Agar	ISP 2 - growth/G	good
Agar	ISP 2 - colony color/R	sand yellow (1002)
Agar	ISP 2 - aerial mycelium/A	cream (9001)
Agar	ISP 2 - soluble pigment/S	none
Agar	ISP 3 - G	sparse
Agar	ISP 3 - R	colourless
Agar	ISP 3 - A	signal white (9003), sparse
Agar	ISP 3 - S	green beige (1000)
Agar	ISP 4 - G	sparse
Agar	ISP 4 - R	colourless
Agar	ISP 4 - A	none
Agar	ISP 4 - S	none
Agar	ISP 5 - G	good
Agar	ISP 5 - R	oyster white (1013)
Agar	ISP 5 - A	none
Agar	ISP 5 - S	none
Agar	ISP 6 - G	good
Agar	ISP 6 - R	sand yellow (1002)
Agar	ISP 6 - A	cream (9001)
Agar	ISP 6 - S	none
Agar	ISP 7 - G	good
Agar	ISP 7 - R	pastel violet (4009)
Agar	ISP 7 - A	none
Agar	ISP 7 - S	beige red (3012)
Agar	suter with tyrosine - G	good

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Agar	suter with tyrosine - R	pastel yellow (1034)
Agar	suter with tyrosine - A	cream (9001)
Agar	suter with tyrosine - S	none
Agar	suter without tyrosine - G	good
Agar	suter without tyrosine - R	sand yellow (1002)
Agar	suter without tyrosine - A	cream (9001)
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 alkaline	4
Api zym	Esterase (C4)	2
Api zym	Esterase Lipase (C8)	3
Api zym	Lipase (C14)	4
Api zym	Leucin arylamidase	5
Api zym	Valine arylamidase	2
Api zym	Cystine arylamidase	1
Api zym	Trypsin	2
Api zym	Chymotrypsin	0
Api zym	Phosphatase acid	4
Api zym	Naphtol-AS-BI-phosphohydrolase	2
Api zym	alpha galactosidase	0
Api zym	beta galactosidase	1
Api zym	beta glucuronidase	0
Api zym	alpha glucosidase	4
Api zym	beta glucosidase	5
Api zym	N-acetyl-beta-glucoseamidase	0
Api zym	alpha mannosidase	0

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 45539.

Apizym

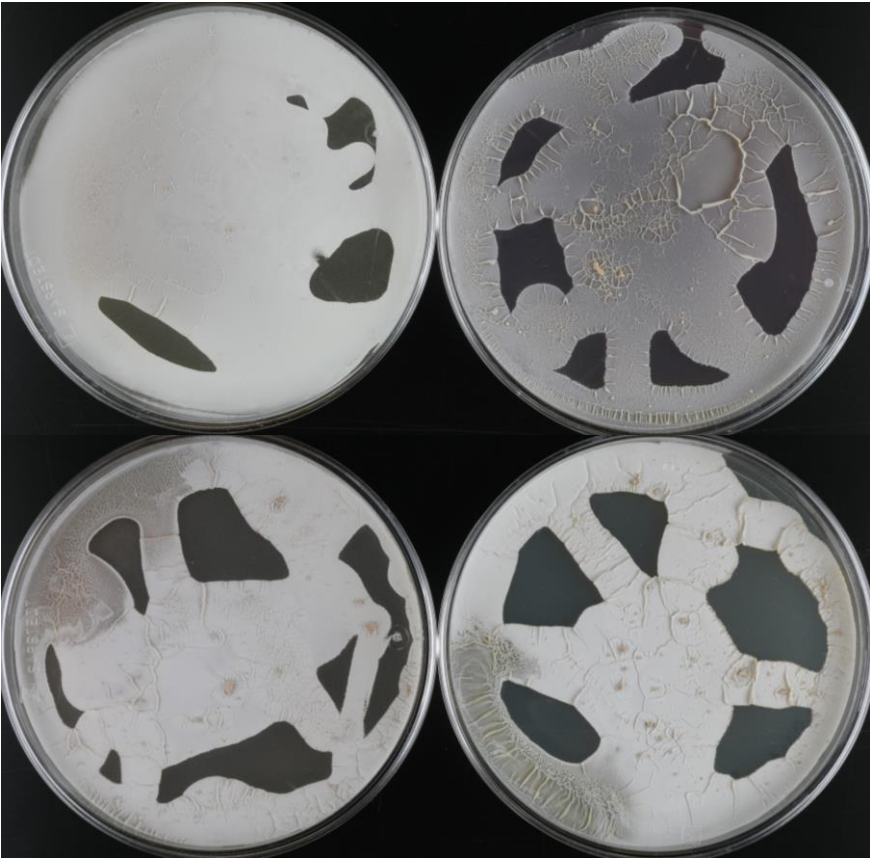
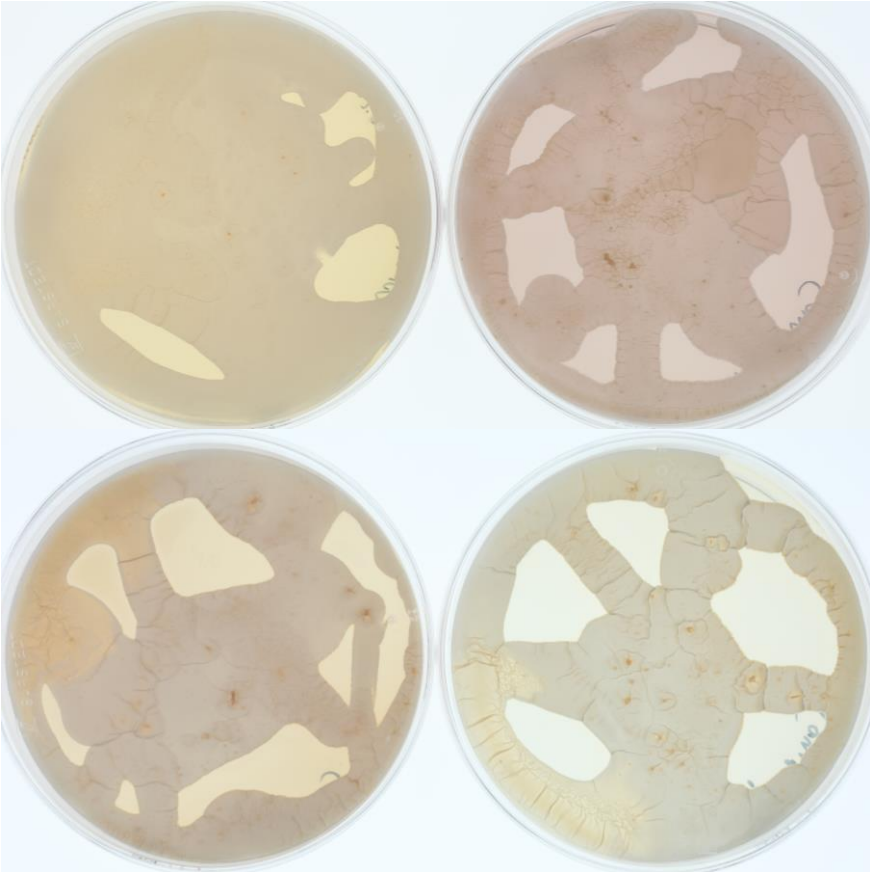


Abbildung 2: Apizym-Teststreifen mit Keim DSM 45539.

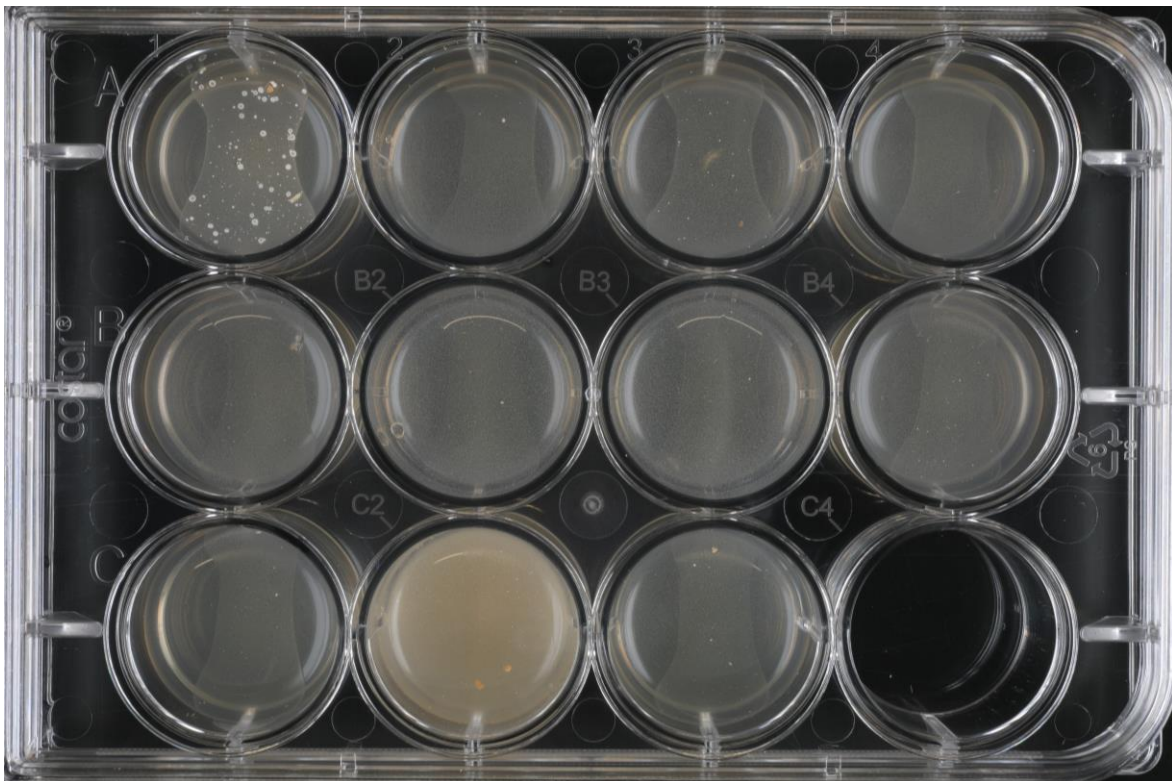
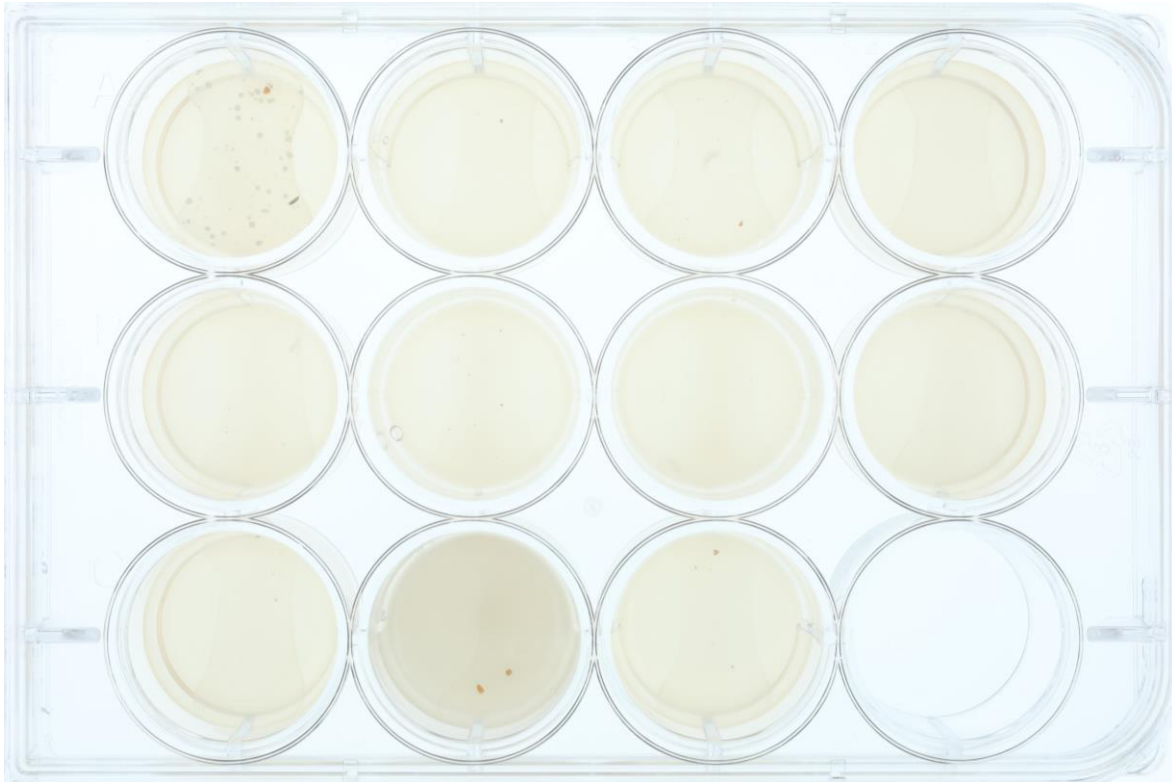
Plates (65, ISP2, ISP3, ISP4, ISP5, ISP7)



(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%)

