

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

Strain		DSM 107559
Genus		<i>Rhodococcus</i>
Species		<i>subtropicus</i>
Status		
Risk group		L1
Type strain		C9-28, KACC 19823
Reference		
Author		Lee, S. D., Kim, Y.-J., Kim, I. S.
Title		Rhodococcus subtropicus sp. nov., a new actinobacterium isolated from a cave
Journal		International Journal of Systematic and Evolutionary Microbiology
Volume		
Page		
Year		2019
Morphology		
Agar	ISP 2 - growth/G	good
Agar	ISP 2 - colony color/R	sand yellow (1002)
Agar	ISP 2 - aerial mycelium/A	none
Agar	ISP 2 - soluble pigment/S	none
Agar	ISP 3 - G	sparse
Agar	ISP 3 - R	colourless
Agar	ISP 3 - A	none
Agar	ISP 3 - S	none
Agar	ISP 4 - G	sparse
Agar	ISP 4 - R	ivory (1014)
Agar	ISP 4 - A	none
Agar	ISP 4 - S	none
Agar	ISP 5 - G	sparse
Agar	ISP 5 - R	ivory (1014), light ivory (1015)
Agar	ISP 5 - A	none
Agar	ISP 5 - S	none
Agar	ISP 6 - G	good
Agar	ISP 6 - R	beige (1001), sand yellow (1002)
Agar	ISP 6 - A	none
Agar	ISP 6 - S	none
Agar	ISP 7 - G	sparse
Agar	ISP 7 - R	ivory (1014), light ivory (1015)
Agar	ISP 7 - A	none
Agar	ISP 7 - S	none
Agar	suter with tyrosine - G	good
Agar	suter with tyrosine - R	beige (1001), grey beige (1019)
Agar	suter with tyrosine - A	none
Agar	suter with tyrosine - S	beige (1001)

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

Agar	suter without tyrosine - G	good
Agar	suter without tyrosine - R	ivory (1014), light ivory (1015)
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		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 alkaline	1
Api zym	Esterase (C4)	0
Api zym	Esterase Lipase (C8)	2
Api zym	Lipase (C14)	1
Api zym	Leucin arylamidase	5
Api zym	Valine arylamidase	5
Api zym	Cystine arylamidase	1
Api zym	Trypsin	0
Api zym	Chymotrypsin	0
Api zym	Phosphatase acid	2
Api zym	Naphtol-AS-BI-phosphohydrolase	2
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	0
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 107559.

Apizym

Abbildung 2: Apizym-Teststreifen mit Keim DSM 107559.

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%)**