

Compendium of Actinobacteria from Dr. Joachim M. Wink  
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Strain		DSM 45201
Genus		<b><i>Modestobacter</i></b>
Species		<b><i>marinus</i></b>
Status		
Risk group		L1
Type strain		42H12-1, CGMCC 4.5581
Reference		
Author		Xiao, J., Luo, Y., Xu, J., Xie, S., Xu, J.
Title		<i>Modestobacter marinus</i> sp. nov., a psychrotolerant actinobacterium from deep-sea sediment, and emended description of the genus <i>Modestobacter</i> .
Journal		<i>Int J Syst Evol Microbiol</i>
Volume		<b>61</b> ( Pt 7 )
Page		1710-1714
Year		2011
Morphology		
Agar	ISP 2 - growth/G	good
Agar	ISP 2 - colony color/R	black brown (8022)
Agar	ISP 2 - aerial mycelium/A	none
Agar	ISP 2 - soluble pigment/S	n. d.
Agar	ISP 3 - G	good
Agar	ISP 3 - R	jet black (9005)
Agar	ISP 3 - A	none
Agar	ISP 3 - S	none
Agar	ISP 4 - G	good
Agar	ISP 4 - R	olive brown (8008)
Agar	ISP 4 - A	none
Agar	ISP 4 - S	none
Agar	ISP 5 - G	good
Agar	ISP 5 - R	khaki grey (7008)
Agar	ISP 5 - A	none
Agar	ISP 5 - S	none
Agar	ISP 6 - G	good
Agar	ISP 6 - R	black brown (8022)
Agar	ISP 6 - A	none
Agar	ISP 6 - S	none
Agar	ISP 7 - G	good
Agar	ISP 7 - R	khaki grey (7008)
Agar	ISP 7 - A	none
Agar	ISP 7 - S	none
Agar	suter with tyrosine - G	good
Agar	suter with tyrosine - R	olive brown (8008)
Agar	suter with tyrosine - A	none
Agar	suter with tyrosine - S	none

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

Agar	suter without tyrosine - G	good
Agar	suter without tyrosine - R	green brown (8000)
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		10%
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)	3
Api zym	Esterase Lipase (C8)	3
Api zym	Lipase (C14)	1
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	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-glucosaminidase	0
Api zym	alpha mannosidase	0
Api zym	alpha fucosidase	0
Api coryne	nitrate reduction	-
Api coryne	Pyraziamidase	-

Compendium of Actinobacteria from Dr. Joachim M. Wink  
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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	<i>Staphylococcus aureus</i>	
Antimicrobial	<i>Escherichia coli</i>	
Antimicrobial	<i>Micrococcus luteus</i>	
Antimicrobial	<i>Pseudomonas aeruginosa</i>	
Antimicrobial	<i>Streptomyces murinus</i>	
Antimicrobial	<i>Bacillus subtilis</i>	
Antimicrobial	<i>Candida albicans</i>	
Antimicrobial	<i>Saccharomyces cerevisiae</i>	
Antimicrobial	<i>Aspergillus niger</i>	

## Apicoryne



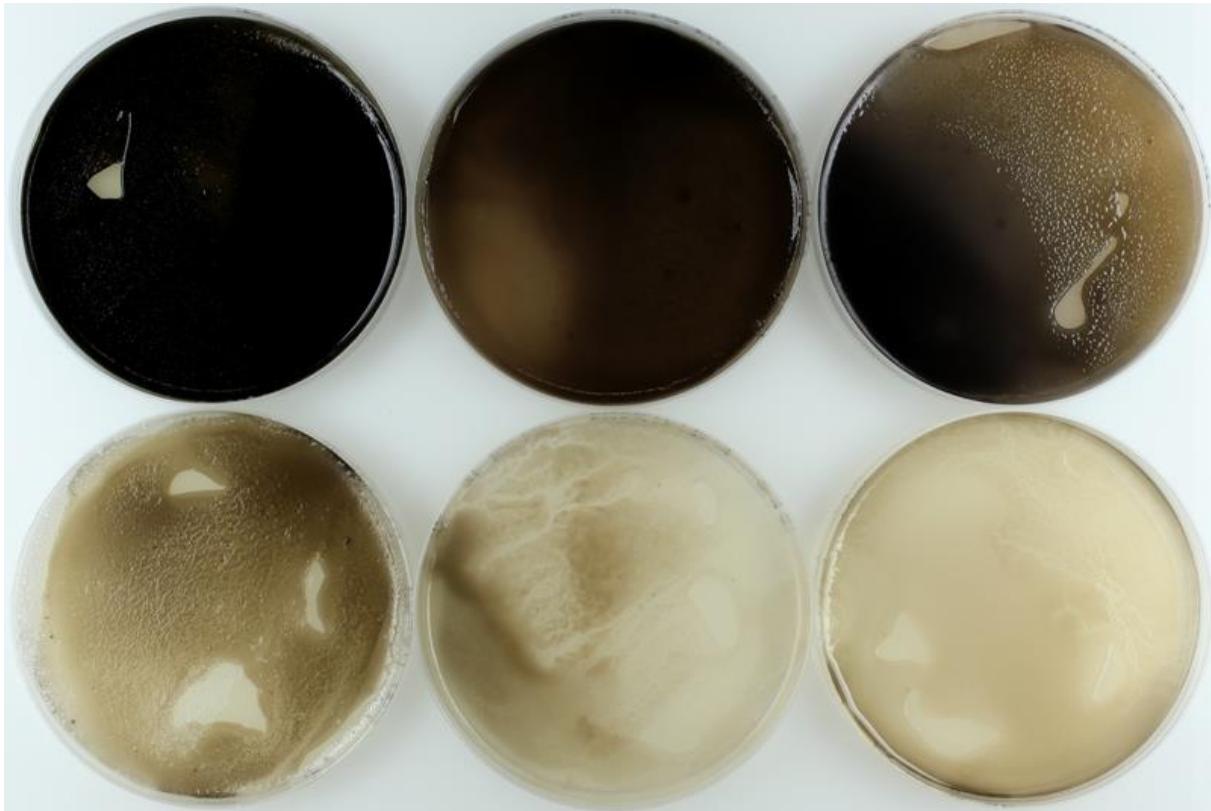
Abbildung 1: Apicoryne-Teststreifen mit Keim DSM 45201.

## Apizym

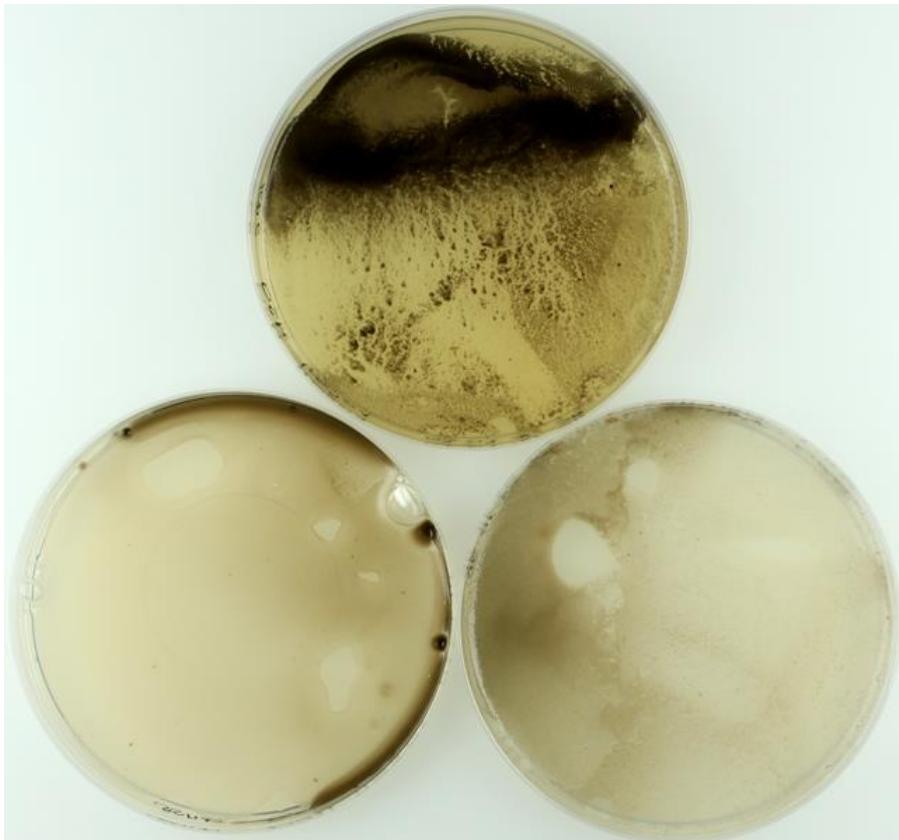


Abbildung 2: Apizym-Teststreifen mit Keim DSM 45201.

**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%)**

