

Compendium of Actinobacteria from Dr. Joachim M. Wink  
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|                           |                           |   |
|---------------------------|---------------------------|---|
| Strain                    |                           | DSM 45930   |
| Genus                     |                           | <i>Streptomonospora</i>   |
| Species                   |                           | <i>tuzyakensis</i>  |
| Status                    |                           |   |
| Risk group                |                           | 1 (provisional classification by DSMZ)  |
| Type strain               |                           | BN506, KCTC 29210   |
| Genbank accession numbers |                           | 16S rRNA gene: <a href="#">KC959224</a>   |
| Reference                 |                           |   |
| Author                    |                           | Tatar, D., Guven, K., Inan, K., Cetin, D., Belduz, A. O., Sahin, N.                               |
| Title                     |                           | <i>Streptomonospora tuzyakensis</i> sp. nov., a halophilic actinomycete isolated from saline soil |
| Journal                   |                           | <i>Antonie Van Leeuwenhoek</i>  |
| Volume                    |                           | <b>109</b> (1)  |
| Page                      |                           | 35-41   |
| Year                      |                           | 2016  |
| Morphology                |                           |   |
| Agar                      | ISP 2 - growth/G          | sparse  |
| Agar                      | ISP 2 - colony color/R    | ivory (1014)  |
| Agar                      | ISP 2 - aerial mycelium/A | none  |
| Agar                      | ISP 2 - soluble pigment/S | none  |
| Agar                      | ISP 3 - G                 | sparse  |
| Agar                      | ISP 3 - R                 | light ivory (1015)  |
| Agar                      | ISP 3 - A                 | none  |
| Agar                      | ISP 3 - S                 | none  |
| Agar                      | ISP 4 - G                 | good  |
| Agar                      | ISP 4 - R                 | ivory (1014), light ivory (1015)  |
| Agar                      | ISP 4 - A                 | none  |
| Agar                      | ISP 4 - S                 | none  |
| Agar                      | ISP 5 - G                 | sparse  |
| Agar                      | ISP 5 - R                 | light ivory (1015)  |
| Agar                      | ISP 5 - A                 | oyster white (1013), sparse   |
| Agar                      | ISP 5 - S                 | none  |
| Agar                      | ISP 6 - G                 | good  |
| Agar                      | ISP 6 - R                 | beige (1001)  |
| 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   | sparse  |
| Agar                      | suter with tyrosine - R   | ochre yellow (1024)   |

|                           |                                |                           |
|---------------------------|--------------------------------|---------------------------|
| Agar                      | suter with tyrosine - A        | none                      |
| Agar                      | suter with tyrosine - S        | none                      |
| Agar                      | suter without tyrosine - G     | sparse                    |
| Agar                      | suter without tyrosine - R     | khaki grey (7008)         |
| Agar                      | suter without tyrosine - A     | pure white (9010), sparse |
| Agar                      | suter without tyrosine - S     | none                      |
|                           | Sporechains/Sporangia          |                           |
| Physiology                |                                |                           |
| Melanin                   |                                | -                         |
| pH                        | range                          |                           |
| pH                        | optimum                        |                           |
| temperature               | range                          |                           |
| temperature               | optimum                        |                           |
| sodium chloride tolerance |                                | 7,5%                      |
| 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)           | 2                         |
| Api zym                   | Lipase (C14)                   | 0                         |
| Api zym                   | Leucin arylamidase             | 5                         |
| Api zym                   | Valine arylamidase             | 2                         |
| Api zym                   | Cystine arylamidase            | 0                         |
| Api zym                   | Trypsin                        | 0                         |
| Api zym                   | Chymotrypsin                   | 4                         |
| Api zym                   | Phosphatase acid               | 1                         |
| Api zym                   | Naphtol-AS-BI-phosphohydrolase | 3                         |
| Api zym                   | alpha galactosidase            | 1                         |
| Api zym                   | beta galactosidase             | 3                         |
| Api zym                   | beta glucuronidase             | 0                         |
| Api zym                   | alpha glucosidase              | 3                         |
| Api zym                   | beta glucosidase               | 1                         |
| Api zym                   | N-acetyl-beta-glucosaminidase  | 2                         |
| 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 glucosaminidase | - |
| 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



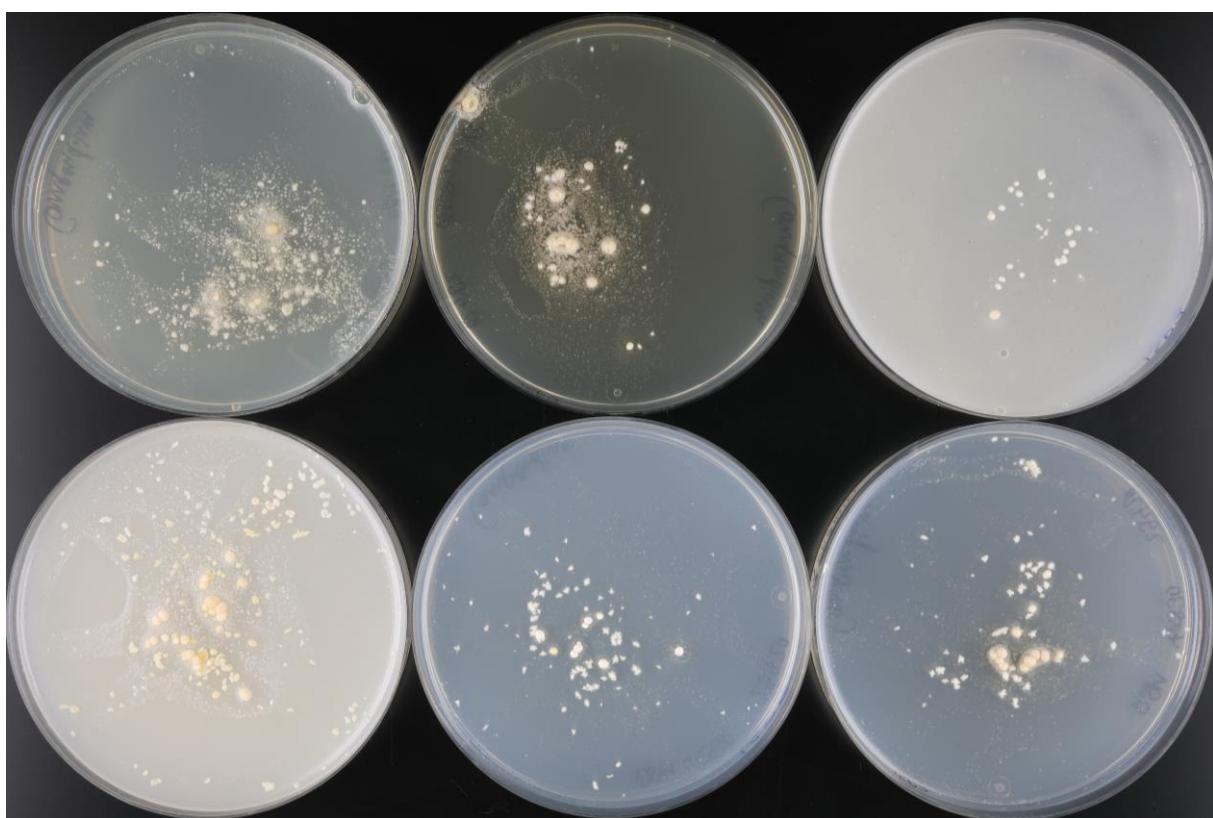
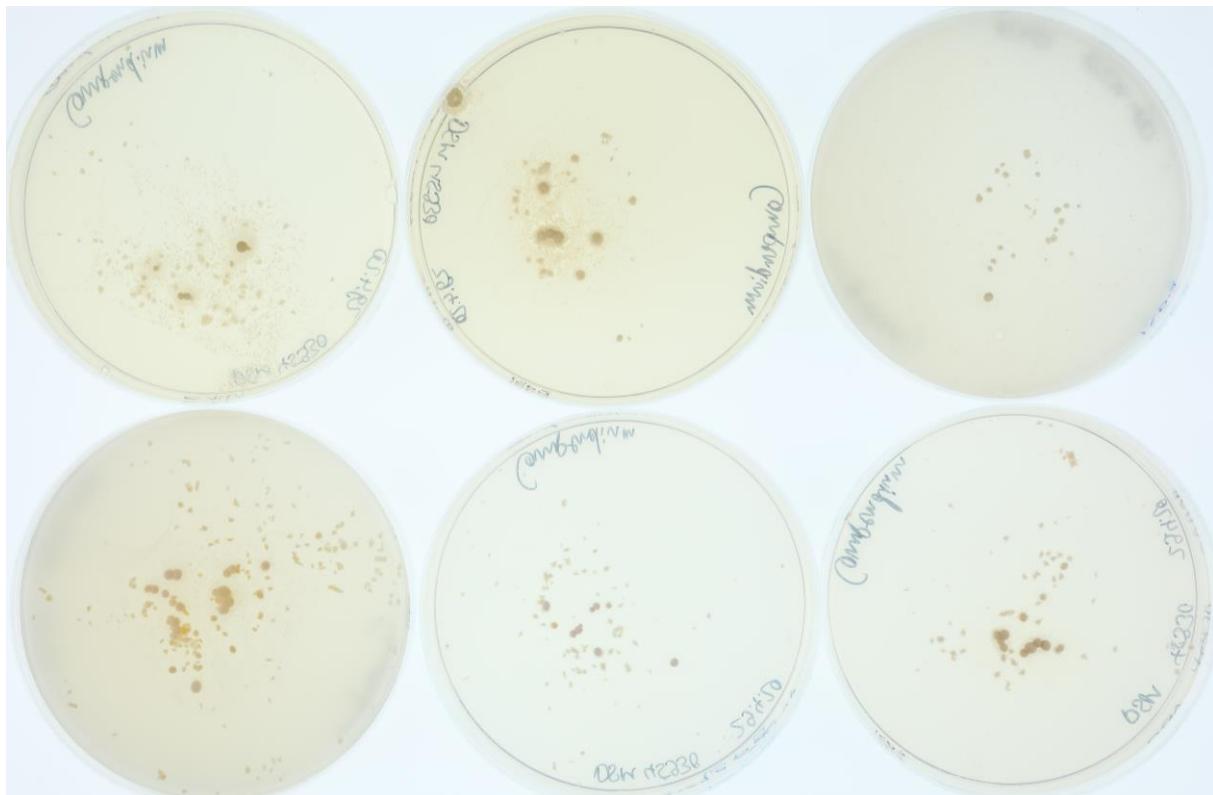
Abbildung 1: Apicoryne-Teststreifen mit Keim DSM 45930.

## Apizym

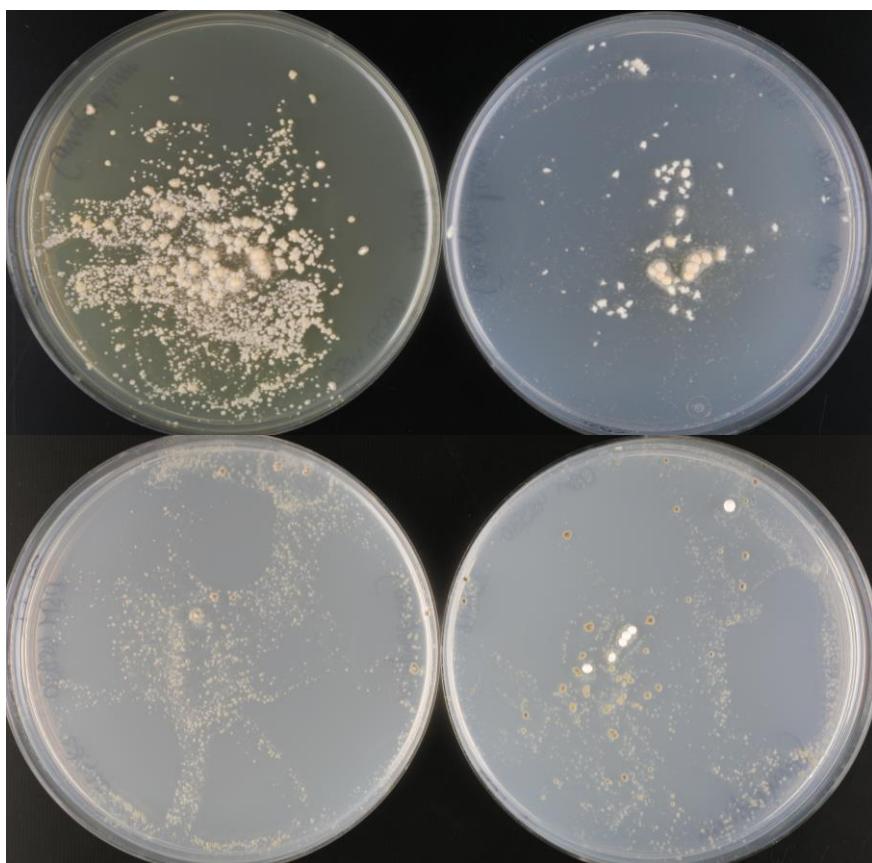
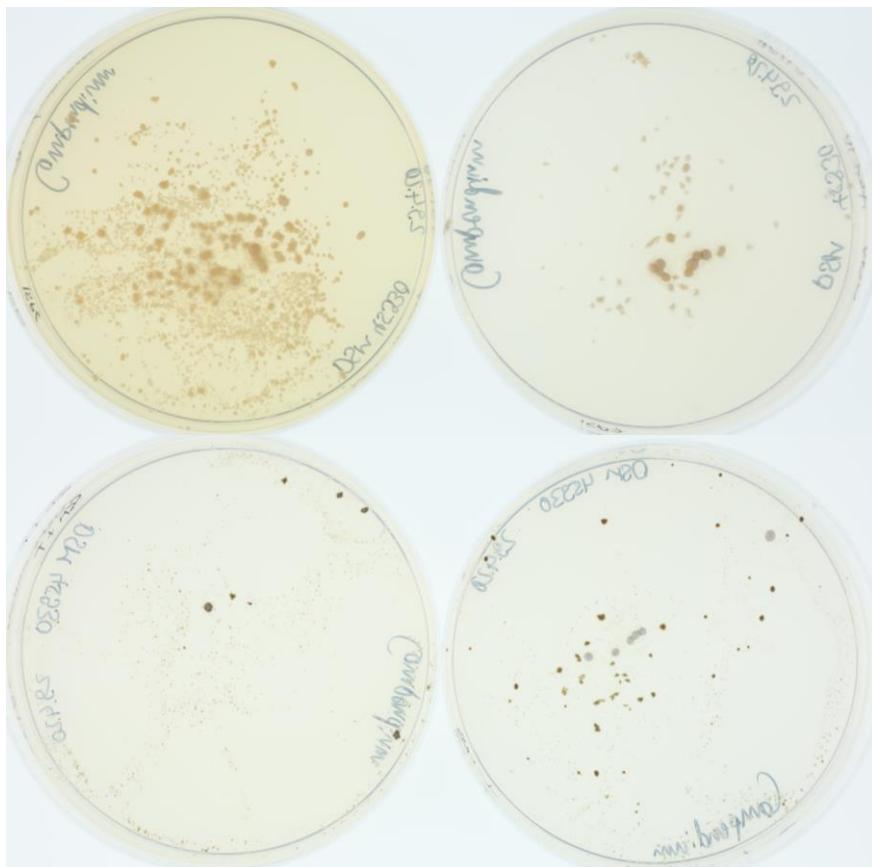


Abbildung 2: Apizym-Teststreifen mit Keim DSM 45930.

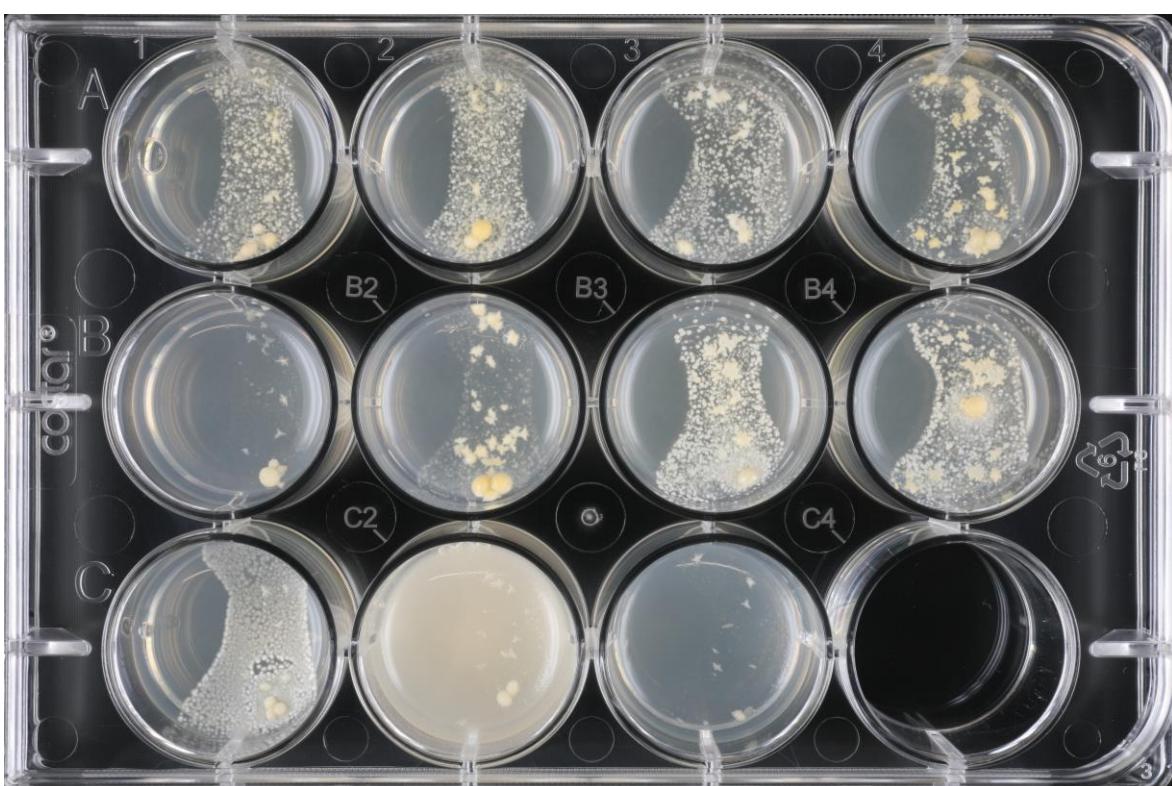
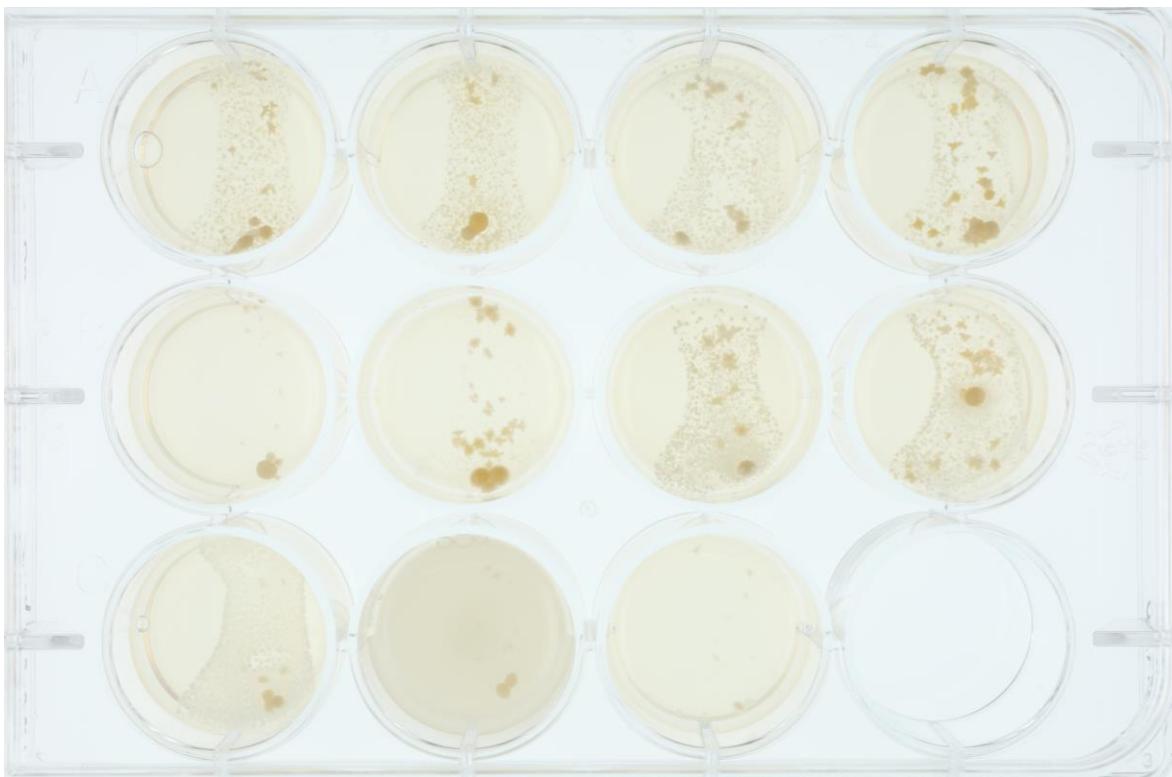
**Plates (514, ISP2, ISP3, ISP4, ISP5, ISP7)**



(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%)**

