

## Supporting materials

**article title:** Steroid Metabolism in Thermophilic Actinobacteria *Saccharopolyspora hirsuta* VKM Ac-666<sup>T</sup>

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**author names:** Tatyana Lobastova, Victoria Fokina, Sergey Tarlachkov, Andrey Shutov, Eugeny Bragin, Alexey Kazantsev, Marina Donova

**\*Correspondence:** 2vvfokina@gmail.com

**Supplementary Table S5.** Actinobacterial strains with the similar proteins to the reference KshA, KshB, KstD of *M. tuberculosis* H37Rv.

No.	Strain	Protein_ID	Protein length	Query cover (%)	e-value	Number of identical amino acids	% of identical amino acids
<b>KshA,</b> NP_218043.1 <i>M. tuberculosis</i> H37Rv; protein length = <b>386 aa</b>							
<b>1</b>	<i>Thermomonospora curvata</i> DSM 43183	ACY99045.1	<b>386</b>	<b>97</b>	2.00E-146 (2e-165)	212	<b>54.9</b>
<b>2</b>	<i>Amycolatopsis granulosa</i> DSM 45669	NIH88125.1	<b>378</b>	<b>95</b>	1.00E-162 (0.0)	237	<b>62.7</b>

[illegible]

<b>1</b>	<i>Thermomonospora curvata</i> DSM 43183	ACY99056.1	<b>351</b>	<b>92</b>	9.00E-106 (1e-134)	194	<b>55.2</b>
<b>2</b>	<i>Amycolatopsis granulosa</i> DSM 45669	NIH88123.1	<b>337</b>	<b>95</b>	1.00E-94 (8e-119)	183	<b>54.3</b>
		NIH83853.1	<b>363</b>	<b>94</b>	4.00E-88 (1e-113)	171	<b>47.1</b>
<b>3</b>	<i>Thermocatellispora tengchongensis</i> DSM 45615	MBB5136877.1	<b>344</b>	<b>92</b>	2.00E-102 (1e-127)	195	<b>56.7</b>
<b>4</b>	<i>Amycolatopsis methanolica</i> 239	WP_017983770.1	<b>337</b>	<b>95</b>	4.00E-95 (2e-125)	180	<b>53.4</b>
<b>5</b>	<i>Amycolatopsis thermalba</i> strain 50.9b NODE_16	WP_094008251.1	<b>337</b>	<b>95</b>	4.00E-97 (5e-128)	184	<b>54.6</b>
<b>6</b>	<i>Amycolatopsis ruanii</i> strain 49.3e NODE_6	WP_116109913.1	<b>337</b>	<b>95</b>	3.00E-96 (4e-127)	183	<b>54.3</b>

<b>7</b>	<i>Microbispora siamensis</i> NBRC 104113	GIH66241.1	<b>357</b>	<b>95</b>	5.00E-102 (7e-134)	197	<b>55.2</b>
<p style="text-align: center;"><b>KstD,</b></p> <p style="text-align: center;">NP_218054.1 <i>M. tuberculosis</i> H37Rv; protein length = <b>563 aa</b></p>							
<b>1</b>	<i>Thermomonospora curvata</i> DSM 43183	ACY99057.1	<b>559</b>	<b>97</b>	6.00E-131 (5e-152)	266	<b>47.6</b>
<b>2</b>	<i>Amycolatopsis granulosa</i> DSM 45669	NIH88126.1	<b>555</b>	<b>98</b>	0.0	344	<b>62.0</b>
		NIH83847.1	<b>562</b>	<b>97</b>	8.00E-127 (2e-144)	245	<b>43.6</b>
<b>3</b>	<i>Thermocatellispora tengchongensis</i> DSM 45615	MBB5136872.1	<b>520</b>	<b>98</b>	2.00E-88 (3e-103)	216	<b>41.5</b>
<b>4</b>	<i>Amycolatopsis methanolica</i> 239	WP_017983767.1	<b>555</b>	<b>98</b>	0.0	348	<b>62.7</b>

<b>5</b>	<i>Amycolatopsis</i> <i>thermalba</i> strain 50.9b NODE_16	WP_094008248.1	<b>555</b>	<b>98</b>	0.0	349	<b>62.9</b>
<b>6</b>	<i>Amycolatopsis ruanii</i> strain 49.3e NODE_6	WP_116109911.1	<b>555</b>	<b>98</b>	0.0	349	<b>62.9</b>
<b>7</b>	<i>Microbispora</i> <i>siamensis</i> NBRC 104113	GIH66240.1	<b>557</b>	<b>97</b>	6.00E-132 (4e-154)	266	<b>47.8</b>