

## Strains page:

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<b>Derivatives of <i>Streptomyces coelicolor</i> A3(2).</b>			
More info on this species here: <a href="https://actinobase.org/index.php?title=Streptomyces_coelicolor_A3(2)">https://actinobase.org/index.php?title=Streptomyces_coelicolor_A3(2)</a>			
Strain	Description	Genotype	References
<i>S. coelicolor</i> M145	Genome sequenced strain. Missing the plasmids SCP1 and SCP2.	SCP1-, SCP2-	(1–3)
<i>S. coelicolor</i> M1146	Heterologous expression host, derived from M145. Pathways disrupted for all four antibiotics made under standard laboratory conditions.	$\Delta act \Delta red \Delta cpk \Delta cda$	(4)
<i>S. coelicolor</i> M1152	Heterologous expression host, derived from M1146 by selecting for rifampicin resistance.	$\Delta act \Delta red \Delta cpk \Delta cda$ <i>rpoB</i> [S433L]	(4)
<i>S. coelicolor</i> M1154	Heterologous expression host, derived from M1152 by selecting for rifampicin and streptomycin resistance.	$\Delta act \Delta red \Delta cpk \Delta cda$ <i>rpoB</i> [S433L]	(4)

		<i>rpsL</i> [P91S]	
<i>S. coelicolor</i> M510	Derivative of M145 missing RedD, the pathway specific activator of undecylprodigiosin. Cannot make undecylprodigiosin.	$\Delta redD$	(5)
<i>S. coelicolor</i> M511	Derivative of M145 missing ActII-4, the pathway specific activator of actinorhodin. Cannot make actinorhodin.	$\Delta actII-4$	(5)
<i>S. coelicolor</i> M512	Derivative of M145 missing ActII-4 and RedD. Cannot make actinorhodin or undecylprodigiosin.	$\Delta actII-4 \Delta redD$	(5)
<i>S. coelicolor</i> M600	<i>S. coelicolor</i> strain derived from A3(2), contains a large genome duplication that is not present in M145.	SCP1-, SCP2-	(6)
<i>S. coelicolor</i> M520	Derivative of M600 missing RedD, the pathway specific activator of undecylprodigiosin. Cannot make undecylprodigiosin.	$\Delta redD$	Unpublished
<i>S. coelicolor</i> M521	Derivative of M600 missing ActII-4, the pathway specific activator of actinorhodin. Cannot make actinorhodin	$\Delta actII-4$	Unpublished

<i>S. coelicolor</i> M522	Derivative of M600 missing ActII-4 and RedD. Cannot make actinorhodin or undecylprodigiosin.	$\Delta actII-4 \Delta redD$	Unpublished
<p><b><i>Streptomyces venezuelae</i> NRRL B-65442 strains</b></p> <p>More info on this species here: <a href="https://actinobase.org/index.php?title=Streptomyces_venezuelae">https://actinobase.org/index.php?title=Streptomyces_venezuelae</a></p>			
<i>Streptomyces venezuelae</i> NRRL B-65442	Wild type strain. Has a mutation in the spore pigment gene <i>vnz_33525</i> which gives rise to green spores and contains plasmid pSVJI1.		(7) 11/03/2025 11:32:00
<i>S. venezuelae</i> $\Delta mtrA$	<i>mtrA</i> deletion mutant that constitutively over-produces chloramphenicol		Unpublished
<i>S. venezuelae</i> M1700	Cannot make chloramphenicol	$\Delta cml$	Unpublished
<i>S. venezuelae</i> M1701	Cannot make jadomycin	$\Delta jad$	Unpublished
<i>S. venezuelae</i> M1702	Cannot make chloramphenicol or jadomycin	$\Delta cml \Delta jad$	Unpublished
<p><b><i>Streptomyces lividans</i> strains</b></p> <p>More info on this species here: <a href="https://actinobase.org/index.php?title=Streptomyces_lividans">https://actinobase.org/index.php?title=Streptomyces_lividans</a></p>			
<i>S. lividans</i> 1326 (aka <i>S. lividans</i> 66)	Wild type strain. Genome sequence accession number APVM00000000.		(8)
TK23	Plasmid free derivative of <i>S. lividans</i> 66. TK23 is prototrophic and expresses chromosomally encoded resistance to spectinomycin	SpcR, SLP2-, SLP3-	

TK24	Plasmid free derivative of <i>S. lividans</i> 66. It is prototrophic and expresses chromosomally encoded resistance to streptomycin. Genome sequence accession number CP009124.	StrR, SLP2-, SLP3-	(9)
<b><i>Escherichia coli</i> strains used for <i>Streptomyces</i> genetic engineering</b>			
ET12567	<i>E. coli</i> strain that cannot methylate DNA	<i>dam- dcm-</i>	
ET12567/pUZ8002	ET12567 strain with non-transmissible helper plasmid for conjugation		
DH5α/pUB307	<i>E. coli</i> strain DH5α with transmissible helper plasmid for conjugation		
Top10/pR9406	<i>E. coli</i> strain Top10 with transmissible helper plasmid for conjugation		
BW25113/pIJ790	<i>E. coli</i> strain BW25113 with lambda Red recombination plasmid, for cosmid or plasmid mediated gene replacement		(10)
DH5α/pCP20	<i>E. coli</i> strain DH5α with FLP recombinase plasmid		(10)

## References

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8. Cruz-Morales et al (2013). The Genome Sequence of *Streptomyces lividans* 66 Reveals a Novel tRNA-Dependent Peptide Biosynthetic System within a Metal-Related Genomic Island. *Genome Biol Evol.* 5(6):1165–75.
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