

Table 4. Tetracycline Genes Modified April 22, 2021

Originally modified from MMBR 2001; 65:232-260 with permission from ASM Journals

Protein name	Genes	Genes Included	% homology DNA	% homology aa	GenBank #
<b>Efflux Genes</b>					
Tet(A)	<i>tet(A)</i>		99%	99%	AF534183, AJ419171 X75761, AF542061, AJ517790, AY196695, X00006, L27758, AJ313332
Tet(B)	<i>tet(B)</i>		99%	99%	J01830, AF223162 V00611, AL513383, AJ277653, AF326777, AP000342
Tet(C)	<i>tet(C)</i>		98%-100%	98%-100%	AB023657, AY043298 X01654 AY046276, Y19114, AF055345 K00005, NC_003213, NC_003123 NC_003124, NC_002109, AY043299
Tet(D)	<i>tet(D)</i>		99%		X65876, L06798, D16172 AF467074, AF467077
Tet(E)	<i>tet(E)</i>				L06940, EF471995 Y119116, CP000645
Tet(G)	<i>tet(G)</i>		91%-99%	94%-99%	AF071555, AF133139, AJ276217, S52437, AF133140
Tet(H)	<i>tet(H)</i>		99%	99%	U00792, AJ245947 Y15510, Y16103,

Tet(J)	<i>tet(J)</i>			AF038993, ACLE1000065
Tet(K)	<i>tet(K)</i>	96%-98%	99%-100%	M16217, J01764, SAU38428 U38656, S67449
Tet(L)	<i>tet(L)</i>	80%-99%	81%-99%	M11036, X08034, D00006, X51366 X60828, D12567, U17153 AY081910, M29725, HM235948
TetA(P)	<i>tetA(P)</i>	98%	97%-100%	AB001076, L20800, AB054980 HQ399624
Tet(V)	<i>tet(V)</i>			AF030344
Tet(Y)	<i>tet(Y)</i>			AF070999
Tet(Z)	<i>tet(Z)</i>			AF121000
Tet(30)	<i>tet(30)</i>	<i>tet(A)</i>		AF090987
Tet(31)	<i>tet(31)</i>			AJ250203, GQ283908
Tet(33)	<i>tet(33)</i>			AJ420072, DQ077487, AY255627 DQ390458
Tet(35)	<i>tet(35)</i>			AF353562
Tet(38)	<i>tet(38)</i>			AY825285, FN433596, FR821779
Tet(39)	<i>tet(39)</i>			AY743590, EU495991, EU495989, FR821779
Tet(40)	<i>tet(40)</i>			AM419751, FJ158002
Tet(41)	<i>tet(41)</i>			AY264780
Tet(42)	<i>tet(42)</i>			EU523697
Tet(43)	<i>tet(43)</i>			GQ244501
Tet(45)	<i>tet(45)</i>			JF837330, GU584222 GU584217, JF837331

TetA(46)	<i>tetA(46)</i>			HQ652506
TetB(46)	<i>tetB(46)</i>			HQ652506
Tet(57)	<i>tet(57)</i>			KP137702
Tet(58)	<i>tet(58)</i>			KY887560.1
Tet(59)	<i>tet(59)</i>			KU736878, KU736879
TetA(60)	<i>tetA(60)</i>			KX000272.1
TetB(60)	<i>tetB(60)</i>			KX000273.1
Tet(62)	<i>tet(62)<sup>e</sup></i>			MN340018.1 <sup>g</sup> aa only
Tet(63)	<i>tet(63)<sup>f</sup></i>			<b>CP053076.1</b>
Tet(64)	<i>tet(64)<sup>h</sup></i>			CJ066_RS05975 GenBank assembly accession GCA_002276145.1
Otr(B)	<i>otr(B)</i>			AF079900, AF061335
Otr(C)	<i>otr(C)</i>			AY509111
	<i>tcr3</i>			D38215

### Ribosomal Protection Genes

Tet(M)	<i>tet(M)</i>	89%-100%	97%-100%	U08812, X75073, M85225 M21136, X92947, X04388, U58985, X56353, M85225, X90939, FN433596, X04388, X56353 EU182585, JN846696, AM990992
Tet(O)	<i>tet(O)</i>	96%-99%	93%-99%	M18896, Y07780, M20925
TetB(P)	<i>tetB(P)</i>			L20800, NC_010937
Tet(Q)	<i>tet(Q)</i>			Z21523, U73497 X58717, L33696
Tet(S)	<i>tet(S)</i>			L09756, X92946, DQ377340

Tet(T)	<i>tet(T)</i>			L42544, AY660530
Tet(W)	<i>tet(W)</i>	89%-100%	89-100%	AJ222769, AY049983, AY196917 AY196919, AJ427422, FN396364 AJ427421, AY196918, DQ060146
Tet(32)	<i>tet(32)</i>	98%		DQ647324, EF626941 EF626942, EF626943, EU722333
Tet(36)	<i>tet(36)</i>			AJ514254
Tet(44)	<i>tet(44)</i>			FN594949, NZ_ABDU01000081
Tet(61)	<i>tet(61)</i>			KY887560 <sup>c</sup>
Otr(A)	<i>otr(A)</i>			X53401
	<i>tet</i>			M74049

### Enzymatic Genes

Tet(X)	<i>tet(X)</i>	<i>tet(X2)- tet(X14)</i> <sup>d</sup>	83%-100%	82%-100%	M37699, EU918344 <sup>a</sup> , AB097942 <sup>b</sup> GU014535, MK134375, MK134376 <sup>d</sup>
Tet(34)	<i>tet(34)</i>				AB061440
Tet(37)	<i>tet(37)</i>				AF540889
Tet(47)	<i>tet(47)</i>				KR857681
Tet(48)	<i>tet(48)</i>				KR857682
Tet(49)	<i>tet(49)</i>				KR857683
Tet(50)	<i>tet(50)</i>				KR857684
Tet(51)	<i>tet(51)</i>				KR857685

Tet(52)	<i>tet(52)</i>	KR857686
Tet(53)	<i>tet(53)</i>	KR857687
Tet(54)	<i>tet(54)</i>	KR857688
Tet(55)	<i>tet(55)</i>	KR857689
Tet(56)	<i>tet(56)</i>	WP_003635403 <sup>g</sup> only aa
Tet(57)	<i>tet(57)</i>	KP137702

### Unknown Genes

Tet(U)	<i>tet(U)</i>	U01917
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**Blue indicates new information since last update Only representative GenBank # provided not all that are available**

<sup>a</sup> from *Spingobacterium* where it is functional; <sup>b</sup> *P. aeruginosa*; <sup>c</sup> *tet(61)* on same plasmid as *tet(58)* Dr. Chrudimsky

<sup>d</sup> He et al., Nature Micro Sept 2019 1450-1456 ; In GenBank lots of different *tet(X)* alleles all highly related and should not be designated as different alleles by nomenclature center;

<sup>e</sup> **McDonell, Morris et al., Plasmid 2021 <https://doi.org/10.1016/j.plasmid.2021.102563>;**

<sup>f</sup> **Zhu, Wang Schwarz et al. JAC 2021 76:576-581 doi:10.1093/jac/dkaa485;**

<sup>g</sup> **this is under the protein not DNA NCBI list ;**

<sup>h</sup> **Somprasong, Hall, Webb et al., AAC 2021 65:e01767-20 <https://doi.org/10.1128/AAC.01767-20>**