Supplementary Table 2. Gene detected in Corynebacterium genomes associated with the biosynthesis of mycolic acids, and menaquinones.

Assembly Accession	Species name	Strain name	Mycolic acid Biosynthesis																														Menaquinone biosynthesis - classical pathway							Elongation		Saturation	Menaquinone biosynthesis - futalosine pathway								
			fas	_fabD_	_fabH_	_kasA_	_kasB_	_mabA_	_hadA_	_hadB_	_hadC_	_inhA_	_accD6_	_accA3_	_accE_	_accD4_	_accD5_	_pks13_	_fadD32_	_cmrA_	_mmpL3_	_cmaA1_	_cmaA2_	_umaA1_	_pcaA_	_mmaA1_	_mmaA2_	_mmaA3_	_mmaA4_	_desA1_	_desA2_	_desA3_	_menA_	_menB_	_menC_	_menD_	_menE_	_menF_	_menG_	_uppS_	_hepST_	_menJ_	_mqnA_	_mqnB_	_mqnC_	_mqnD_	_mqnE_	_SCO4490_	_SCO4491_	_ubiX_
GCA_000159115.1	_Corynebacterium accolens_	ATCC 49725	ND	ND	ND	31.82	ND	34.43	ND	ND	ND	ND	45.47	74.28	34.72	77.33	50.28	64.84	57.35	65.04	66.9	34.43	34.84	36.26	33.7	34.8	34.07	33.1	34.04	ND	ND	ND	56.88	70.21	50.74	40.11	44.38	44.26	69.2	60.57	64.53	49.21	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_900156035.1	_Corynebacterium afermentans_ subsp. _afermentans_	DSM 44280	56.92	ND	ND	31.58	ND	ND	ND	ND	ND	ND	72.69	72.31	ND	75.83	61.77	63	53.91	64.66	63.75	33.69	33.45	35.14	31.99	31.88	31.14	30.88	ND	ND	ND	ND	56.25	78.36	57.59	42.15	46.24	43.35	65.38	58.75	61.78	49.74	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_001941425.1	_Corynebacterium ammoniagenes_	DSM 20306	60.55	ND	ND	ND	ND	34.4	ND	ND	ND	ND	82.32	77.16	41.38	77.04	67.49	65.26	64.81	66.17	62.55	33.57	32.52	36.63	33.94	33.7	32.62	33.22	33.21	ND	ND	ND	56.27	77.56	53.27	38.22	46.49	43.41	69.47	62.03	65.43	50.82	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000755185.1	_Corynebacterium amycolatum_ *	ATCC 6931†	48.46	ND	ND	ND	ND	ND	ND	ND	ND	ND	72.11	80.95	ND	ND	84.17	ND	30.61	ND	ND	31.87	33.92	37.55	31.09	32.73	31.02	32.87	32.62	ND	ND	50.81	55.75	74.84	57.4	43.18	40.86	44.66	65.2	63.29	59.35	50.76	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_900156665.1	_Corynebacterium appendicis_	DSM 44531	ND	ND	ND	30.1	30.1	ND	ND	ND	ND	ND	45.8	70.27	38.75	77.3	49.91	62.63	57.77	68.8	61.68	31.77	34.49	35.51	32.72	31.52	ND	30.96	30.64	ND	ND	ND	55.48	78.78	53.85	42.28	43.63	45.14	66.08	58.65	59.82	50.13	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_001941445.1	_Corynebacterium aquilae_	S-613	51.07	ND	ND	ND	30.93	33.91	ND	ND	ND	ND	83.18	83.64	46.91	80.51	88.75	66.2	65.15	65.41	70.24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	52.91	54.84	76.28	51.29	40.7	46.72	42.19	69.3	58.51	67.69	46.3	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000590555.1	_Corynebacterium argentoratense_	DSM 44202	50.66	ND	ND	ND	ND	ND	ND	ND	ND	ND	82.82	84.82	45.78	81.52	88.93	67.59	65.14	65.04	66.62	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	51.32	54.75	79.54	49.57	41.71	46.69	41.58	66.67	56.09	69.81	52.69	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000732945.1	_Corynebacterium atypicum_	R2070	48.79	ND	ND	ND	ND	ND	ND	ND	ND	ND	46.95	67.58	ND	76.18	55.45	64.02	60.13	71.8	73.06	34.19	33.57	37.36	33.82	31.87	31.41	31.75	32.49	ND	ND	ND	58.93	80.13	55.18	44.21	44.84	45.95	71.62	59.07	63.58	46.78	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000767255.1	_Corynebacterium auriscanis_	CIP 106629	49.43	ND	ND	ND	ND	33.16	ND	ND	ND	ND	46.7	70.82	ND	70.51	49.07	61.21	60.07	56.44	63.94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	45.73	59.79	78.14	45.95	40.66	38.53	41.96	68.75	61.54	60.49	48.33	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000183325.2	_Corynebacterium bovis_	DSM 20582	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	46.74	73.85	32.81	69.34	48.83	64.26	58.93	55.51	64.61	ND	ND	31.51	ND	ND	ND	ND	ND	ND	ND	ND	57.4	79.53	55.83	61.94	45.85	40.37	70.48	61.14	62.65	52.74	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000344785.1	_Corynebacterium callunae_	DSM 20147	90.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	94.66	92.06	57.32	91.09	79.54	85.06	85.23	86.09	85.71	34.06	34.27	35.52	33.98	34.07	32.43	32.13	34.46	ND	ND	ND	57.44	74.21	51.63	40.53	42.94	43.56	70.18	65.02	89.43	50.4	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000980815.1	_Corynebacterium camporealensis_	DSM 44610	47.84	ND	ND	30.42	ND	35.18	ND	ND	ND	ND	79.56	73.77	47.89	77.06	68.05	65.05	63.68	66.92	68.35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	54.36	72.76	49.71	39.89	43.78	45.75	67.11	60.41	63.64	49.74	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000372085.1	_Corynebacterium capitovis_	DSM 44611	61.71	ND	ND	30.89	ND	32.24	ND	ND	ND	ND	74.36	73.46	43.28	76.8	66.35	63.13	54.81	67.29	62.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	56.1	74.68	56.56	41.71	47.7	44.08	68.86	53.36	64.09	50.41	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000550785.1	_Corynebacterium casei_	LMG S-19264	46.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	81.95	77.66	40.23	75.88	67.49	64.16	65.71	66.92	66.67	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	54.48	76.6	53.69	37.84	45.8	43.68	69.03	61.86	64.2	47.01	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000379705.1	_Corynebacterium caspium_*	DSM 44850	61.83	ND	ND	ND	30.53	31.69	ND	ND	ND	ND	75.85	73.23	ND	78.52	64.3	66.63	58.92	71.7	69.42	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	58.19	79.02	52.98	38.12	42.2	44.72	68.42	60.76	64.92	50.13	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000372385.1	_Corynebacterium ciconiae_*	DSM 44920	45.1	ND	ND	ND	ND	31.22	ND	ND	ND	ND	77.84	83.45	62.86	78.52	86.51	64.77	65.14	74.06	66.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	48.67	57.29	76.3	54.18	39.57	46.04	44.72	70.8	63.37	61.54	50.26	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_900105505.1	_Corynebacterium coyleae_	DSM 44184	57.11	ND	ND	ND	ND	33.88	ND	ND	ND	ND	73.33	73.59	ND	77	62.67	64.15	54.22	68.05	63.53	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	51.92	78.36	55.96	42.34	44.24	42.78	66.67	58.75	60.58	48.82	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_001643015.1	_Corynebacterium crudilactis_	JZ16	94.98	ND	ND	ND	ND	35.83	ND	ND	ND	ND	97.97	95.6	82.93	96.9	95.03	91.44	93.45	92.86	87.67	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	55.4	72.64	51.79	40.77	41.3	42.33	69.74	65.84	88	50.66	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_900111265.1	_Corynebacterium cystitidis_	DSM 20524	60.6	ND	ND	ND	31.48	33.61	ND	ND	ND	ND	85.27	75.68	36.76	77.58	69	62.22	63.68	65.91	59.57	39.16	ND	39.42	ND	ND	42.55	38.1	38.36	ND	ND	ND	55.52	75.48	55.7	43.75	40.91	44.89	67.98	59.83	66.87	52.56	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_001277995.1	_Corynebacterium deserti_	GIMN1.010	93.5	ND	ND	ND	ND	39.67	ND	ND	ND	ND	97.61	94.25	74.39	93.22	82.31	89.39	90.57	92.48	89.77	32.72	35.66	35.9	33.2	33.7	30.88	31.77	33.57	ND	ND	ND	55.75	73.9	53.57	40.96	42.19	43.72	70.18	64.61	90.29	50.53	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_001457455.1	_Corynebacterium diphtheriae_	NCTC 11397	50.55	ND	ND	ND	ND	36.51	ND	ND	ND	ND	82.14	85.14	48.61	81.36	88.58	68.34	68.7	74.06	70.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	53.68	56.63	76.95	50.91	40.29	44.35	44.17	62.5	60.84	70.25	53.3	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000767055.1	_Corynebacterium doosanense_	CAU 212	62.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	80.48	76.65	ND	77.73	65.97	65.61	67.11	70.3	66.93	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	58.1	74.92	52.35	43.22	46.34	46.87	66.96	59.75	61.75	50.13	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000011305.1	_Corynebacterium efficiens_	YS-314	85.21	ND	ND	ND	ND	33.88	ND	ND	ND	ND	97.24	90.54	62.2	89.36	91.59	84.45	86.85	84.53	82.97	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	60.29	72.59	52.52	40.82	45.32	45.53	70.43	63.79	82.29	48.48	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_001021025.1	_Corynebacterium epidermidicanis_	DSM 45586	51.58	ND	ND	ND	ND	33.05	ND	ND	ND	ND	79.08	85.33	47.14	81.04	88.91	69.4	62.35	72.18	68.63	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	53.92	59.04	75.39	52.23	41.09	43.94	41.47	65.93	63.33	64.42	50.55	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000525655.1	_Corynebacterium falsenii_	DSM 44353	47.23	ND	ND	ND	ND	ND	ND	ND	ND	ND	47.24	72.82	ND	71.01	50.1	61.06	58.05	58.94	63.99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	49.38	58.06	75.86	40.74	41.59	38.31	42.08	67.54	59.6	60.8	48.84	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_001941465.1	_Corynebacterium flavescens_	OJ8	60.91	ND	ND	ND	30.05	34.44	ND	ND	ND	ND	81.95	77.16	49.3	76.22	67.12	65.44	64.53	65.02	65.58	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	58.87	72.09	52.35	40.03	45.28	42.55	70.18	59.32	65.05	49.74	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_900176865.1	_Corynebacterium fournierii_	Marseille-P2948	ND	ND	ND	ND	ND	31.8	ND	ND	ND	ND	46.96	71.69	ND	75.24	49.05	66.67	54.32	64.66	62.73	33.69	33.1	35.14	31.62	31.88	31.14	30.88	ND	ND	ND	ND	55.68	78.36	54.74	41.87	43.48	41.78	66.67	57.5	61.49	49.47	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_001941485.1	_Corynebacterium frankenforstense_	ST18	61.49	ND	ND	ND	ND	34.57	ND	ND	ND	ND	75.68	75.63	ND	79.01	66.22	64.26	67.62	76.98	66.75	32.35	32.06	35.16	32.72	31.87	31.05	30.6	32.13	ND	ND	ND	61.31	74.52	50.62	42.78	44.05	45.3	71.18	59.83	63.05	47.38	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000428805.1	_Corynebacterium freiburgense_	DSM 45254	50.13	ND	ND	ND	ND	32.49	ND	ND	ND	ND	82.32	84.12	50	79.84	89.44	68.19	67.34	71.32	64.64	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50.92	55.17	76.87	53.61	41.06	40.38	41.89	67.4	65.53	67.95	50.67	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000143825.1	_Corynebacterium genitalium_	ATCC 33030	ND	ND	ND	ND	30.5	31.17	ND	ND	ND	ND	46.27	68.58	42.19	77.67	51.13	62.19	56.12	66.92	62.76	31.41	32.75	34.06	31.39	30.43	ND	ND	31.05	ND	ND	ND	55.94	77.1	49.41	42.19	45.53	42.08	62.56	57.83	62.73	49.48	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000159595.1	_Corynebacterium glucuronolyticum_	ATCC 51866	55.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	69.49	78.89	41.98	78.14	84.4	61.62	56.97	76.14	69.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	49.29	80.72	49.69	40.29	46.99	46.74	65.64	63.56	64.4	46.97	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000011325.1	_Corynebacterium glutamicum_	ATCC 13032	99.97	ND	ND	ND	ND	33.08	ND	ND	ND	ND	100	99.83	100	99.81	100	100	99.83	100	99.87	32.61	33.22	35.07	32.43	33.7	ND	30.42	32.18	ND	ND	ND	55.94	73.58	53.73	41.95	42.45	43.46	68.86	64.61	100	50	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000626675.1	_Corynebacterium glyciniphilum_	AJ 3170	48.06	ND	ND	ND	ND	39.13	ND	ND	ND	ND	51.41	68.87	ND	68.55	56.53	60.38	56.84	56.98	64.35	34.19	30.32	33.46	34.07	32.71	32.22	32.84	33.21	ND	ND	50.13	58.48	73.33	50.75	43.36	42.91	40.24	70.09	62.4	61.28	51.27	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000341345.1	_Corynebacterium halotolerans_	YIM 70093	51.24	ND	ND	ND	ND	31.98	ND	ND	ND	ND	87.29	79.02	40.54	82.56	67.23	71.6	67.68	72.93	76.45	31.99	34.94	36.5	32.82	31.5	31.8	30.51	32.26	ND	ND	53.24	58.33	79.8	54.3	41.51	45.8	45.26	69.83	64.26	70.06	51.48	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000819445.1	_Corynebacterium humireducens_	DSM 45392	50.65	ND	ND	ND	ND	38.46	ND	ND	ND	ND	86.74	81.05	ND	80.98	68.24	70.62	70	70.3	77.34	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	51.19	56.74	76.57	50.46	40.91	44.29	45.18	68.42	64.56	67.89	48.96	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000403725.1	_Corynebacterium ihumii_	GD7	56.74	ND	ND	ND	ND	ND	ND	ND	ND	ND	72.88	72.53	ND	76.02	61.58	62.63	53.91	64.66	63.89	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	55.17	78.36	57.06	41.49	43.94	43.88	64.96	58.75	61.21	49.47	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000739455.1	_Corynebacterium imitans_	DSM 44264	59.29	ND	ND	ND	ND	34.01	ND	ND	ND	ND	77.15	74.62	ND	77.58	65.78	62.88	54.41	66.92	64.85	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	53.5	77.2	56.47	42.12	44.99	43.99	67.09	56.5	62.24	49.16	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000577555.1	_Corynebacterium jeddahense_	JCB	ND	ND	ND	30.55	ND	ND	ND	ND	ND	ND	48.01	73.33	ND	76.02	49.63	63.65	55.82	64.66	64.61	33.69	33.45	35.51	31.25	31.52	30.45	31.05	ND	ND	ND	ND	53.43	79.02	56.39	42.29	45.8	44.11	67.39	57.14	61.74	50.56	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000163435.1	_Corynebacterium jeikeium_	ATCC 43734	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	46.56	71.58	ND	71.46	50	58.74	56.67	58.87	61.42	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	58.06	72.73	46.39	51.69	33.98	41.96	65.2	61.7	61.18	39.64	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000023145.1	_Corynebacterium kroppenstedtii_ *	DSM 44385	ND	ND	ND	ND	ND	32.08	ND	ND	ND	ND	70.32	76.39	ND	ND	83.93	ND	ND	ND	30.65	34.8	34.84	37.31	34.43	37.23	34.31	33.7	35.71	ND	ND	ND	57.69	77.07	49.23	40.65	39.02	43.13	65.79	59.49	57.67	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000980835.1	_Corynebacterium kutscheri_	DSM 20755	61.58	ND	ND	ND	33.65	35.87	ND	ND	ND	ND	84.43	80.57	45.12	81.43	88.43	69.23	71.67	72.93	72.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	53.5	72.96	50	37.65	43.47	41.26	67.98	59.67	68.01	49.87	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_001274895.1	_Corynebacterium lactis_*	RW2-5	46.58	ND	ND	ND	ND	ND	ND	ND	ND	ND	72.11	81.8	40.3	ND	85.1	ND	ND	ND	30.89	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50.91	57.88	75.8	53.33	45.62	45.51	44.78	67.11	60.76	60.17	49.62	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000159635.1	_Corynebacterium lipophiloflavum_	DSM 44291	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	46.42	72.33	ND	76.22	51.69	62.42	55.67	65.04	62.37	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	55.63	75.24	56.25	45.77	46.2	43.72	67.69	60.16	61.73	50.14	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_001412085.1	_Corynebacterium lowii_	R-50085	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	47.39	75.73	ND	79.88	54.14	66.85	59.22	71.8	70.58	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	57.86	76.85	55.39	40.22	45.88	44.52	68.86	63.29	62.69	51.39	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000379425.1	_Corynebacterium lubricantis_	DSM 45231	46.02	ND	ND	ND	ND	33.2	ND	ND	ND	ND	84.53	79.35	33.82	75.39	68.24	64.49	63.24	67.29	64.93	32.13	32.17	35.53	32.23	32.23	31.18	32.49	33.58	ND	ND	ND	55.99	74.45	54.52	41.37	42.82	44.11	67.54	59.07	66.16	50.66	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000835165.1	_Corynebacterium marinum_	DSM 44953	50.99	ND	ND	ND	ND	ND	ND	ND	ND	ND	86.37	79.86	ND	80.43	68.05	70.68	68.51	70.3	71.91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	53.56	58.18	78.14	54.27	42.63	50.18	45.18	69.74	58.98	65.26	50.91	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000442645.1	_Corynebacterium maris_	DSM 45190	46.12	ND	ND	ND	ND	32.26	ND	ND	ND	ND	82.69	76.82	41.1	75.92	65.36	66.4	67.56	69.81	68.14	34.31	31.36	34.33	33.98	32.46	33.82	30.8	32.23	ND	ND	ND	54.64	76.18	52.54	41.48	48.21	44.93	66.67	63.25	64	49.33	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000420605.1	_Corynebacterium massiliense_	DSM 45435	43.52	ND	ND	ND	30.91	37.16	ND	ND	ND	ND	60.29	73.55	ND	77.97	57.23	64.56	55.54	66.92	66.41	32.49	33.45	34.41	31.99	31.9	32.62	30.99	34.77	ND	ND	ND	54.3	74.52	53.08	41.27	44.09	48.09	69.3	61.44	61.89	52.39	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000375365.1	_Corynebacterium mastitidis_	DSM 44356	ND	ND	ND	ND	30.37	32.09	ND	ND	ND	ND	49.07	77.05	ND	80.55	56.77	66.48	59.22	69.78	70.75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	63.91	79.48	55.21	40.47	47.24	44.66	70.74	59.92	61.77	52.78	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000175375.1	_Corynebacterium matruchotii_	ATCC 14266	50.34	ND	ND	ND	ND	ND	ND	ND	ND	ND	81.32	82.29	48.57	82.17	85.63	67.26	65.1	78.11	70.69	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	55.93	78.36	51.95	38.79	43.53	41.69	60.53	58.44	67.18	50.89	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000805675.1	_Corynebacterium minutissimum_	ATCC 23348	61.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	80.29	74.62	ND	78.4	68.06	64.46	62.63	65.91	63.64	33.58	32.4	34.8	31.14	33.33	31.77	32.17	31.91	ND	ND	ND	55.27	71.7	51.63	39.18	42.18	44.81	67.37	60.76	66.87	51.07	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_001020985.1	_Corynebacterium mustelae_	DSM 45274	50.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	82.6	84.32	49.38	83.14	88.22	69.08	69.66	78.2	68.66	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	54.74	58.63	77.52	49.4	40.18	45.53	41.92	65.79	60.33	65.81	51.58	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_900103625.1	_Corynebacterium mycetoides_	DSM 20632	61.48	ND	ND	ND	ND	35.42	ND	ND	ND	ND	74.36	73.55	ND	76.74	65.38	61.17	53.86	65.41	67.51	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	61.72	73.97	57.29	43.34	44	42.3	66.23	58.13	65.43	49.33	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000213935.2	_Corynebacterium nuruki_	S6-4	47.35	ND	ND	ND	ND	33.07	ND	ND	ND	ND	48.09	67.55	ND	70.51	55.2	59.68	54.3	56.23	63.09	32.39	30.32	31.99	ND	31.31	30.82	ND	30.46	ND	ND	48.48	57.76	75.16	51.51	48.97	40	39.88	67.54	63.49	60.18	50.68	ND	ND	ND	ND	ND	30.25	ND	34.62
GCA_001412105.1	_Corynebacterium oculi_	R-50187	ND	ND	ND	31.23	ND	32.62	ND	ND	ND	ND	48.12	74.49	ND	80.47	56.58	65.97	59.56	68.42	70.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	61.48	77.88	54.98	39.75	46.34	42.51	70.18	63.98	62.69	51.97	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_001941565.1	_Corynebacterium phocae_	M408/89/1	49.06	ND	ND	ND	31.56	ND	ND	ND	ND	ND	77.9	75.84	ND	77.39	67.48	63.64	62.67	66.67	67.57	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	55.56	76.51	53.41	41.56	45.14	39.39	66.96	61.28	62.2	50	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_900092335.1	_Corynebacterium phoceense_	MC1	60.24	ND	ND	ND	ND	34.97	ND	ND	ND	ND	82.76	77.99	ND	78.4	67.82	62.97	61.83	66.92	68.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	55.21	75.16	52.16	40.11	46.26	44.26	70.35	61.18	66.06	48.39	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_001044155.1	_Corynebacterium pilosum_	CIP103422	52.59	ND	ND	30.65	30.91	33.61	ND	ND	ND	ND	85.27	77.68	38.24	79.27	68.43	64.18	69.26	66.04	63.89	30.77	31.36	34.07	31.5	30.77	30.69	31.12	33.46	ND	ND	ND	58.39	75.9	55.84	42.78	44.98	42.43	68.42	61.7	61.82	51.44	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000375525.1	_Corynebacterium propinquum_	DSM 44285	58.69	ND	ND	ND	ND	ND	ND	ND	ND	ND	81.58	74.24	ND	79.34	66.92	61.36	60.34	67.67	64.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	53.82	75.64	53.05	40.88	44.48	44.2	68.72	59.57	59.94	49.63	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000688415.1	_Corynebacterium pseudodiphtheriticum_	DSM 44287	57.85	ND	ND	ND	ND	ND	ND	ND	ND	ND	81.95	75.08	ND	78.95	67.11	61.49	60.85	66.92	64.86	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	54.48	75	52.77	39.79	44.48	43.9	69.64	61.11	60.24	48.89	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_002155265.1	_Corynebacterium pseudotuberculosis_	ATCC 19410	50.32	ND	ND	ND	ND	33.98	ND	ND	ND	ND	83.98	86.13	51.43	82.21	86.37	71.51	66.1	76.32	73.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	52.52	59.49	74.53	51.05	40.4	43.64	44.11	66.67	64.56	69.64	51.32	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000411375.1	_Corynebacterium pyruviciproducens_	ATCC BAA-1742	ND	ND	ND	ND	ND	34.33	ND	ND	ND	ND	68.74	77.36	45.88	77.56	81.73	62.21	53.63	74.62	69.46	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	52.08	80.92	49.22	41.18	46.39	46.3	65.95	63.33	63.47	48.33	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000177535.2	_Corynebacterium resistens_	DSM 45100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	47.46	69.43	ND	71.29	50.84	59.05	60.23	57.85	64.98	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	48.2	57.3	79.02	46.05	41.41	37.67	42.51	68.56	60.71	60.38	47.81	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000833575.1	_Corynebacterium singulare_	IBS B52218	47.38	ND	ND	ND	ND	33.51	ND	ND	ND	ND	79.63	75.97	ND	78.21	67.49	65.75	62.63	65.4	68.58	33.94	32.17	34.43	31.87	32.97	32.13	31.67	31.91	ND	ND	ND	55.4	72.01	52.23	39	42.82	44.08	68.42	60.76	66.57	53.46	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_001941505.1	_Corynebacterium sphenisci_	DSM 44792	46.8	ND	ND	ND	32.34	ND	ND	ND	ND	ND	71.32	80.27	ND	68.41	83.58	54.78	53.22	56.98	65.64	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	54.21	60.65	76.01	ND	46.13	53.1	44.78	62.11	60.24	62.76	51.68	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_900113445.1	_Corynebacterium spheniscorum_	PG 39	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	84.15	76.63	ND	80.47	67.35	67.5	65.31	68.77	66.46	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50.24	56.6	75.96	49.71	37.96	42.93	41.46	66.23	61.44	67.17	50.89	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000427865.1	_Corynebacterium sputi_	DSM 45148	50.63	ND	ND	ND	ND	32.66	ND	ND	ND	ND	73.63	81.46	ND	66.86	84.82	57.04	53.05	54.34	63.59	ND	ND	ND	30.1	ND	ND	ND	30.16	ND	ND	52.8	54.51	74.29	59.81	44.18	45.91	44.11	58.77	60.17	64.16	51.14	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_001941345.1	_Corynebacterium stationis_	622=DSM 20302	60.81	ND	ND	ND	ND	31.82	ND	ND	ND	ND	82.14	77.83	39.08	75.88	68.62	64.58	64.19	67.29	61.31	35.48	31.71	36.26	34.67	34.07	32.49	33.22	31.97	ND	ND	ND	55.56	76.6	52.21	38.65	46.22	42.03	69.16	60.85	65.12	48.91	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000159135.1	_Corynebacterium striatum_	ATCC 6940	59.23	ND	ND	31.29	33.58	35.5	ND	ND	ND	ND	82.69	77.16	47.89	77.82	66.79	66.52	62.61	65.4	65.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	54.9	71.25	53.71	38.79	44.48	43.44	69.64	60.43	65.65	49.21	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000418365.1	_Corynebacterium terpenotabidum_	Y-11	47.31	ND	ND	ND	ND	35.89	ND	ND	ND	ND	46.34	68.88	ND	67.57	47.75	59.82	54.35	56.23	61.5	30	30.65	33.57	ND	30.64	ND	30.07	ND	ND	ND	ND	58.72	73.48	51.03	42.4	39.88	40.75	69.3	57.86	59.94	49.5	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_001021045.1	_Corynebacterium testudinoris_	DSM 44614	65.55	ND	ND	ND	ND	ND	ND	ND	ND	ND	87.21	78.51	39.19	80.04	68.13	70.34	68.36	72.18	73.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	51.31	55.75	79.33	52.24	42.71	43.99	45.8	68.53	65.53	68.81	50.78	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_900105305.1	_Corynebacterium timonense_	DSM 45434	59.3	ND	ND	31.15	ND	37.1	ND	ND	ND	ND	75.46	73.21	ND	76.02	65.97	63.76	57.34	65.79	63.78	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	75.48	57.86	44.81	44.17	44.26	66.52	59.75	59.94	49.29	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000372445.1	_Corynebacterium ulceribovis_	DSM 45146	49.36	ND	ND	ND	ND	32.51	ND	ND	ND	ND	45.69	72.01	ND	68.02	51.4	59.55	51.01	57.89	64.52	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	64.16	76.75	51.69	44.79	40.34	42.67	64.47	56.17	61.92	48.44	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000069945.1	_Corynebacterium urealyticum_	DSM 7109	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	46.31	69.52	ND	68.54	46.84	57.91	57.57	59.7	64.29	30.29	30.82	31.21	31.27	30.87	ND	ND	30.2	ND	ND	ND	58.8	74.84	43.97	40.84	40.87	42.47	67.54	60.52	61.11	46.62	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000747315.1	_Corynebacterium ureicelerivorans_	IMMIB RIV-2301	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	48.48	72.84	ND	76.61	50.19	62.88	54.39	63.16	63.95	33.45	33.8	35.51	32.35	32.25	31.14	31.25	ND	ND	ND	ND	56.25	78.69	57.5	42.2	46.34	41.73	67.09	57.92	60.06	49.6	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_001021065.1	_Corynebacterium uterequi_	DSM 45634	50.45	ND	ND	ND	ND	ND	ND	ND	ND	ND	47.12	60.17	ND	75.44	50.6	63.65	58.88	68.8	64.75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	60.09	70.69	55.45	39.51	47.97	46.49	70.93	59.92	64.63	50.66	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000550805.1	_Corynebacterium vitaeruminis_	DSM 20294	51.09	ND	ND	ND	ND	ND	ND	ND	ND	ND	86.45	86.99	50	81.62	88.04	72.22	71.31	76.32	73.37	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	51.84	60.28	73.63	54.12	41.79	46.82	43.72	65.2	60.59	63.14	54.18	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_001552415.1	_Corynebacterium xerosis_	NBRC 16721	50.21	ND	ND	ND	ND	ND	ND	ND	ND	ND	74.57	81.97	49.32	69.01	85.31	60.26	55.86	55.47	69.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50.86	59.85	77.67	51.45	48.05	40.96	44.08	69.96	62.98	63.3	53.08	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000296405.1	**_Turicella otitidis_***	**ATCC 51513**	57.87	ND	ND	ND	ND	ND	ND	ND	ND	ND	72.5	65.59	ND	ND	64.42	ND	ND	ND	ND	33.33	33.45	34.78	32.12	32.61	31.41	31.52	32.49	ND	ND	ND	57.4	75.09	56.53	39.34	48.74	46.11	63.16	59.09	55.87	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_000226215.2	_Dietzia alimentaria_	72	54.57	55.89	55.82	ND	ND	66.8	ND	ND	ND	56.98	66.1	73.77	38.96	60.12	75.99	49.38	55.38	66.54	53.07	33.33	32.87	35.14	33.46	33.46	33.45	31.14	33.96	ND	ND	64.15	58.74	75.56	56.21	48.78	50	49.17	66.23	67.76	55.21	54.81	ND	ND	35.02	ND	34.07	ND	ND	ND
GCA_000024785.1	_Gordonia bronchialis_	DSM 43247	59.45	63.25	66.67	65.54	61.02	71.24	37.41	53.24	ND	58.36	65.91	75.8	ND	61.9	83.15	52.2	60.74	63.06	52.36	32.98	35.06	33.21	31.92	32.48	32.59	30.4	32.14	56.35	38.93	61.48	62.54	75.39	65.95	63.83	52.56	46.15	66.67	70.45	54.98	59.02	ND	ND	ND	ND	ND	ND	ND	ND
GCA_001653095.1	_Hoyosella altamirensis_	NBRC 109631	58.27	64.8	54.08	60.46	58.64	64.37	42.11	57.45	44.06	63.67	66.04	79.02	ND	60.89	77.64	48.87	59.9	68.8	48.32	31.77	33.1	32.36	32.49	31.27	33.1	31.83	30.59	ND	ND	61.99	67.49	79.75	58.7	65.52	53.42	50.14	70.59	68.83	52.55	ND	ND	ND	36.79	ND	35.14	ND	ND	ND
GCA_001293125.1	_Lawsonella clevelandensis_	X1036	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50.75	65.65	ND	58.83	57.39	45	40	51.69	52.96	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	53.36	75.63	51.37	40.5	45.03	44.68	69.03	57.71	51.18	ND	ND	ND	ND	ND	ND	ND	ND	ND
GCA_001552615.1	_Millisia brevis_	NBRC 105863	60.83	63.58	50.65	67.71	62.94	67.62	40.28	56.03	40.82	61.98	66.29	79.7	ND	63.5	79.32	48.53	59.03	67.19	50.33	31.05	33.45	32.75	32.6	30.4	31.18	ND	30.47	59.32	37.22	58.58	63.5	83.39	60.5	67.27	51.79	49.46	67.84	66.67	53.33	59.42	ND	ND	35.69	ND	ND	ND	ND	ND
GCA_000195955.2	_Mycobacterium tuberculosis_	H37Rv	99.97	99.67	100	99.76	100	100	99.37	100	100	100	100	99.83	100	99.81	100	100	100	100	99.89	100	100	100	100	100	100	100	100	100	100	100	99.66	99.68	99.69	99.82	99.73	100	100	99.66	50.3	100	ND	ND	37.14	ND	37.35	ND	ND	ND
GCA_900114685.1	_Nocardia asteroides_	DSM 43373	62.78	69.44	54.17	68.7	62.44	72.1	52.45	64.96	42.45	58.24	67.16	79.27	ND	64.8	80.91	54.66	60.81	69.43	51.31	35.25	33.45	33.46	34.53	31.14	34.41	31.65	31.88	58.22	40.08	61.88	70.37	86.44	53.25	66.49	56.47	46.34	73.48	69.23	56.31	60.26	ND	ND	35.69	ND	36.36	ND	ND	ND
GCA_001047055.1	_Rhodococcus rhodochrous_	NBRC 16069	63.19	71	56.16	67.09	62.84	69.4	45.89	59.15	42.45	62.08	67.35	73.39	ND	66.02	81.09	50.37	61.8	71.26	52.24	32.49	32.06	33.33	32.72	31.14	33.69	30.07	30.3	56.48	40	64.06	66.32	85.42	65.3	66.07	61.41	53.07	74.77	70.85	60.12	65.79	ND	ND	34.19	ND	33.73	ND	ND	ND
GCA_000092825.1	_Segniliparus rotundus_	DSM 44985	58.1	60.6	ND	64.44	62.68	67.23	ND	52.55	ND	60.38	61.58	71.43	ND	63.17	72.4	51.2	54.46	43.65	48.17	63.12	55.56	54.33	61.27	54.86	59.44	56.12	54.21	55.92	40.5	58.56	53.41	80.53	46.82	62.39	53.58	ND	63.93	65.46	49.49	47.92	ND	ND	34.42	ND	35.76	ND	ND	ND
GCA_001552855.1	_Skermania piniformis_	NBRC 15059	62.45	65.12	56.65	69.47	65.28	70.09	50.36	61.03	42.07	57.51	67.04	70.49	ND	62.55	81.39	49.03	62.89	67.68	52.65	32.16	33.83	32.97	32.56	ND	31.54	30.33	31.63	56.66	37.69	65.83	67.04	86.46	63.23	64.95	60	46.74	72.44	68.94	55.49	60.89	ND	ND	34.53	ND	35.05	ND	ND	ND
GCA_000380645.1	_Smaragdicoccus niigatensis_	DSM 44881	55.35	63.25	52.51	66.83	60.54	70.82	55.71	61.27	41.48	62.69	66.29	79.39	ND	66.67	78.82	46.16	56.65	65.28	51.44	61.62	55.14	58.74	60.56	58.04	60.14	60.65	53.05	59.37	40.33	64.94	63.07	83	60.25	66.61	52.69	46.72	66.96	69.48	55.25	55	ND	ND	35.92	ND	33.94	ND	ND	ND
GCA_000524475.1	_Tomitella biformata_	AHU 1821	60.86	66.89	53.12	61.32	59.9	70.28	44.37	60.84	39.16	63.94	66.6	82.34	ND	63.43	76.55	48.31	59.18	70.41	53.25	35.98	35.96	35.57	31.77	33.2	33.84	32.72	34.38	56.67	39.83	62.62	64.89	83.05	65.53	64.08	57.34	52.45	70.93	66.8	53.33	60.26	ND	ND	34.95	ND	35.17	ND	ND	ND
GCA_000092225.1	_Tsukamurella paurometabola_	DSM 20162	58.08	64.55	49.39	64.49	57.61	69.49	38.1	57.75	ND	57.99	66.35	77.24	ND	58.46	79.77	49.51	58.24	64.93	42.23	61.25	48.45	54.55	60.35	56.99	58.1	55.16	50	62.03	38.52	64.32	61.57	78.43	52.13	67.93	56.4	47.65	66.67	68.83	50.93	ND	ND	ND	34.53	ND	34.49	ND	ND	ND
GCA_001598915.1	_Williamsia muralis_	NBRC 105860	61.07	65.89	63.96	66.18	60.68	71.37	44.29	51.8	40.77	60.45	66.11	73.25	ND	62.7	82.75	53.25	60.66	65.79	51.93	62.85	54.58	58.89	60.07	57.49	59.23	59.86	57.35	58.5	38.93	61.93	65.4	80.46	62.63	61.88	57.18	33.33	69.16	70.33	51.18	58.93	ND	ND	32.75	ND	30.8	ND	ND	ND
GCA_900142365.1	_Pseudonocardia thermophila_*	DSM 43832	ND	60.4	43.07	49.36	49.26	64.53	ND	47.06	ND	58.94	61.21	73.86	ND	ND	70	ND	32.24	ND	ND	36.33	33.33	35.71	35.12	34.45	38.28	35.55	32.31	ND	ND	51.44	58.82	83.73	56.41	49.73	50.15	44.21	68.97	67.83	53.75	37.22	ND	ND	33.44	ND	37.39	ND	ND	ND

* Reported as mycolic acid absent species by previous experiments.

† ATCC 6931 is not a type genome. It was used as a reference due to the absence of the type genome of _C. amycolatum_ .

Abbreviations

fas, 3-oxoacyl-ACP synthase; fabD, Malonyl CoA-acyl carrier protein transacylase; fabH, 3-oxoacyl-[acyl-carrier-protein] synthase 3; kasA, 3-oxoacyl-[acyl-carrier-protein] synthase 1; kasB, 3-oxoacyl-[acyl-carrier-protein] synthase 2; mabA, 3-oxoacyl-[acyl-carrier-protein] reductase; hadA, (3R)-hydroxyacyl-ACP dehydratase subunit alpha; hadB, (3R)-hydroxyacyl-ACP dehydratase subunit beta; hadC, (3R)-hydroxyacyl-ACP dehydratase subunit gamma; inhA, Enoyl-[acyl-carrier-protein] reductase

accD6, Acetyl-CoA carboxylase beta subunit ; accD4, Acyl-CoA carboxylase subunit beta 1; accD5, Acyl-CoA carboxylase subunit beta 2; accA3, Acyl/Acetyl-CoA carboxylase subunit alpha; accE, Acyl/Acetyl-CoA carboxylase subunit epsilon; pks13, Polyketide synthase; fadD32, Long-chain-fatty-acid--AMP ligase; cmrA, Probable short-chain type dehydrogenase/reductase; mmpL3, Trehalose monomycolate exporter

cmaA1, Cyclopropane mycolic acid synthase 1; cmaA2, Cyclopropane mycolic acid synthase 2; umaA1, Possible mycolic acid synthase; pcaA, Cyclopropane mycolic acid synthase 3; mmaA1, Mycolic acid methyltransferase; mmaA2, Cyclopropane mycolic acid synthase; mmaA3, Methoxy mycolic acid synthase; mmaA4, Hydroxymycolate synthase; desA1, Putative acyl-[acyl-carrier-protein] desaturase; desA2, Putative acyl-[acyl-carrier-protein] desaturase; desA3, NADPH-dependent stearoyl-CoA 9-desaturase

menA, 1,4-dihydroxy-2-naphthoate octaprenyltransferase; menB, 1,4-dihydroxy-2-naphthoyl-CoA synthase; menC, o-succinylbenzoate synthase; menD, 2-succinyl-5-enolpyruvyl-6-hydroxy-3-cyclohexene-1-carboxylate synthase; menE, 2-succinylbenzoate--CoA ligase; menF, Isochorismate synthase; menG, Demethylmenaquinone methyltransferase; uppS, Decaprenyl diphosphate synthase; hepST, Geranylgeranyl pyrophosphate synthase; menJ, Menaquinone reductase

mqnA, Chorismate dehydratase; mqnB, Futalosine hydrolase; mqnC, Cyclic dehypoxanthine futalosine synthase; mqnD, 1,4-dihydroxy-6-naphtoate synthase; mqnE, Aminodeoxyfutalosine synthase; SCO4490, Putative decarboxylase; SCO4491, Putative octaprenyltransferase; ubiX, Flavin prenyltransferase