

S3 Table. BLAST analysis of all identified introns against mt genome sequences deposited in NCBI GenBank. The best hits for each query (intron) is shown. Default blast parameters were used. The prefix CA, CC, CD and CP is added to the intron names for clarity.

Intron (Query)	Top Accession	hit	Description	E-value	% Identity	Query length	Alignment length
CA_COBI1	AB027350		<i>Ophiocordyceps sobolifera</i> mitochondrial gene for small subunit ribosomal RNA	7.083E-31	72,05	1478	293
CA_COBI2	HM149254		<i>Monilinia fructigena</i> isolate ES41 cytochrome b (cytb) gene, complete cds	0	90,52	1289	486
CA_COBI3	FO906979		<i>Leptosphaeria maculans</i> brassicae wa74_scaffold00107 complete sequence	1.199E-21	93,51	1114	190
CA_COBI4	JQ015302		<i>Madurella mycetomatis</i> mitochondrion, complete genome	1.552E-140	86,81	1374	598
CA_COBI5	KC683708		<i>Neurospora crassa</i> OR74A mitochondrion, complete genome	0	84,34	1243	1169
CA_COBI6	JN204426		<i>Ustilaginoidea virens</i> isolate UV-8a Cytb protein (Cytb) gene, complete cds; mitochondrial	0	86,49	1636	836
CA_COX1I1	KT283062		<i>Sclerotinia sclerotiorum</i> 1980 UF-70 mitochondrion, complete genome	0	91,18	2924	903
CA_COX1I2	JX985789		<i>Tricholoma matsutake</i> mitochondrion, complete genome	2.058E-17	96,30	1160	142
CA_COX1I3	JN007486		<i>Chaetomium thermophilum</i> var. thermophilum strain DSM 1495 mitochondrion, complete genome	3.464E-141	89,47	2643	685
CA_COX1I4	JQ354999		<i>Aspergillus clavatus</i> strain NRRL 1 mitochondrion, partial genome	3.239E-173	76,52	1275	882
CA_COX1I5	KP137411		<i>Diaporthe longicolla</i> mitochondrion, complete genome	0	88,37	2647	571
CA_COX1I6	KR109212		<i>Ganoderma applanatum</i> strain CGMCC5.249 mitochondrion, complete genome	1.061E-128	78,38	1332	911
CA_COX1I7	FO906979		<i>Leptosphaeria maculans</i> brassicae wa74_scaffold00107 complete sequence	0	84,75	1324	1327
CA_COX1I8	KF545917		<i>Annulohyphoxylon stygium</i> mitochondrion, complete genome	0	91,84	2664	1026
CA_COX1I9	GU723273		<i>Trametes cingulata</i> strain ATCC 26747 mitochondrion, complete genome	0	85,89	1085	961
CA_COX1I10	JN007486		<i>Chaetomium thermophilum</i> var. thermophilum strain DSM 1495 mitochondrion, complete genome	0	90,74	1181	870

CA_COX1I11	KT283062	<i>Sclerotinia sclerotiorum</i> 1980 UF-70 mitochondrion, complete genome	0	84,65	1576	1517
CA_NAD2I1	KC993182	<i>Pichia kluyveri</i> strain CBS 7907 mitochondrion, complete genome	1.793E-41	80,49	2538	199
CA_NAD2I2	KJ434027	<i>Sclerotinia borealis</i> strain F-4128 mitochondrion, complete genome	2.176E-116	96,77	3477	666
CA_COX2I1	FO906979	<i>Leptosphaeria maculans</i> brassicae wa74_scaffold00107 complete sequence	0	90,00	1566	805
CA_COX2I2	KJ434027	<i>Sclerotinia borealis</i> strain F-4128 mitochondrion, complete genome	0	90,91	2562	1674
CA_NAD4LI1	JN088164	<i>Peltigera malacea</i> mitochondrion, complete genome	0	82,54	4675	654
CA_NAD5I1	AF456838	<i>Cryphonectria parasitica</i> isolate Ep 155 NADH	0	89,10	2118	2086
CA_NAD5I2	FO906020	<i>Leptosphaeria maculans</i> lepidii ibcn84_scaffold00004 complete sequence	0	88,00	4828	1521
CA_NAD5I3	KR952337	<i>Fusarium oxysporum</i> strain UASWS AC1 mitochondrion, complete genome	7.667E-100	84,16	1004	383
CA_ATP6I1	HQ259115	<i>Moniliophthora roreri</i> mitochondrion, complete genome	3.975E-78	70,21	1444	729
CA_ATP6I2	KF545917	<i>Annulohypoxylon stygium</i> mitochondrion, complete genome	0	100,00	1694	1134
CA_ATP6I1	FO905844	<i>Leptosphaeria biglobosa</i> Thlaspii ibcn65_scaffold00057 complete sequence	0	100,00	3366	1030
CA_CO3I1	NW_003533854	<i>Leptosphaeria maculans</i>	0	74,58	2303	1581
CA_NAD6I1	KU050083	<i>Racomitrium lanuginosum</i> mitochondrion, complete genome	7.031E-8	95,45	2835	44
CA_NAD6I2	FO906979	<i>Leptosphaeria maculans</i>	7.987E-96	90,24	2170	646
CA_NAD1I1	KF545917	<i>Annulohypoxylon stygium</i> mitochondrion, complete genome	0	85,28	1975	1770
CA_NAD1I2	KF545917	<i>Annulohypoxylon stygium</i> mitochondrion, complete genome	0	100,00	1406	1114
CA_NAD1I3	KJ434027	<i>Sclerotinia borealis</i> strain F-4128 mitochondrion, complete genome	1.143E-26	73,95	1093	638
CA_NAD4I1	KR952336	<i>Penicillium nordicum</i> strain UASWS BFE487 mitochondrion	1.684E-176	74,29	3469	1011
Intron (Query)	Top hit accession	Description	E-value	% identity	Query length	Alignment length
CD_COBI1	AB027350	<i>Ophiocordyceps sobolifera</i> mitochondrial gene for small subunit ribosomal RNA	4.498E-27	77.61	1487	294

CD_COBI2	HQ259115	<i>Moniliophthora roreri</i> mitochondrion, complete genome	0	88.82	1437	686
CD_COBI3	KC683708	<i>Neurospora crassa</i> OR74A mitochondrion, complete genome	0	84.33	1243	1169
CD_COBI4	HQ908793	<i>Monilia yunnanensis</i> isolate YQG10-6c cytochrome b (cytb) gene	0	79.60	3069	1058
CD_COX1I1	JN007486	<i>Chaetomium thermophilum</i> var. <i>thermophilum</i> strain DSM 1495	0	89.47	1562	925
CD_COX1I2	JQ354999	<i>Aspergillus clavatus</i> strain NRRL 1 mitochondrion, partial genome	4.183E-173	76.51	1275	882
CD_COX1I3	FO906979	<i>Leptosphaeria maculans brassicae</i> wa74_scaffold00107 complete sequence	0	79.88	1324	1327
CD_COX1I4	KF545917	<i>Annulohypoxylon stygium</i> mitochondrion, complete genome	0	92.85	1334	1026
CD_COX1I5	JN007486	<i>Chaetomium thermophilum</i> var. <i>thermophilum</i> strain DSM 1495	0	90.74	1180	870
CD_COX1I6	KT283062	<i>Sclerotinia sclerotiorum</i> 1980 UF-70 mitochondrion, complete genome	0	84.71	1576	1517
CD_NAD2I1	KC993182	<i>Pichia kluyveri</i> strain CBS 7907 mitochondrion, complete genome	8.784E-42	80.48	2500	199
CD_COX2I1	FO906979	<i>Leptosphaeria maculans brassicae</i> wa74_scaffold00107 complete sequence	0	90.00	1574	805
CD_COX2I2	KJ434027	<i>Sclerotinia borealis</i> strain F-4128 mitochondrion, complete genome	0	87.14	2540	1240
CD_NAD5I1	FO906020	<i>Leptosphaeria maculans</i>	6.466E-147	83.56	2001	558
CD_NAD6I1	FO906020	<i>Leptosphaeria maculans</i>	7.41E-45	92.68	2168	393
CD_NAD1I1	KF545917	<i>Annulohypoxylon stygium</i> mitochondrion, complete genome	0	88.46	2034	719
CD_NAD1I2	NW_003533854	<i>Leptosphaeria maculans</i>	0	93.75	2338	1258
CD_NAD1I3	KC683708	<i>Neurospora crassa</i> OR74A mitochondrion, complete genome	0	91.83	1261	1044
CD_NAD4I1	HQ259115	<i>Moniliophthora roreri</i> mitochondrion, complete genome	1.741E-65	79.73	1335	286
Intron (Query)	Top Accession	hit Description	E-value	% identity	Query length	Alignment length
CC_COBI1	AB027350	<i>Ophiocordyceps sobolifera</i> mitochondrial gene for small subunit ribosomal RNA	7.08E-31	72.05	1478	293
CC_COBI12	JQ015302	<i>Madurella mycetomatis</i> mitochondrion, complete genome	1.551E-140	86.80	1374	598

CC_COBI3	KC683708	<i>Neurospora crassa</i> OR74A mitochondrion, complete genome	0	84.33	1243	1169
CC_COX1I1	JN007486	<i>Chaetomium thermophilum</i> var. <i>thermophilum</i> strain DSM 1495 mitochondrion, complete genome	0	89.47	1562	925
CC_COX1I2	KP137411	<i>Diaporthe longicolla</i> mitochondrion, complete genome	0	88.39	1327	951
CC_COX1I3	FO906979	<i>Leptosphaeria maculans</i> brassicae	0	84.74	1324	1327
CC_COX1I4	KF545917	<i>Annulohyphoxylon stygium</i> mitochondrion, complete genome	0	91.42	1285	1026
CC_COX1I5	JN007486	<i>Chaetomium thermophilum</i> var. <i>thermophilum</i> strain DSM 1495 mitochondrion, complete genome	0	90.74	1181	870
CC_COX1I6	KT283062	<i>Sclerotinia sclerotiorum</i> 1980 UF-70 mitochondrion, complete genome	0	84.58	1576	1517
CC_NAD2I1	JX271275	<i>Agaricus bisporus</i> var. <i>bisporus</i> H97 mitochondrion, complete genome	8.616E-62	75.44	2524	781
CC_NAD2I2	XM_003342324	<i>Sordaria macrospora</i> k-hell hypothetical protein (SMAC_12650), mRNA	4.744E-160	84.23	1152	571
CC_COX2I1	FO906979	<i>Leptosphaeria maculans</i> brassicae	0	90.00	1566	805
CC_NAD5I1	KR952337	<i>Fusarium oxysporum</i> strain UASWS AC1 mitochondrion, complete genome	2.464E-100	84.15	1004	383
CC_ATP6I1	EU053989	<i>Phaeosphaeria nodorum</i> SN15 mitochondrion, complete genome	0	100	1862	1075
Intron (Query)	Top Accession	hit Description	E-value	% identity	Query length	alignment length
CP_COBI1	AB027350	<i>Ophiocordyceps sobolifera</i> mitochondrial gene for small subunit ribosomal RNA	3.953E-28	76.62	1590	360
CP_COBI12	KC683708	<i>Neurospora crassa</i> OR74A mitochondrion, complete genome	0	85.96	2510	749
CP_COBI3	HQ908793	<i>Monilia yunnanensis</i> isolate YQG10-6c cytochrome b (cytb) gene, complete cds; mitochondrial	0	80.84	3050	1058
CP_COX1I1	JN007486	<i>Chaetomium thermophilum</i> var. <i>thermophilum</i> strain DSM 1495 mitochondrion, complete genome	0	94.11	2592	1871
CP_COX1I2	FO905844	<i>Leptosphaeria biglobosa</i>	0	79.17	2403	1473
CP_COX1I3	KF673550	<i>Ganoderma sinense</i> mitochondrion, complete genome	1.998E-53	97.36	2606	570
CP_COX1I4	KF545917	<i>Annulohyphoxylon stygium</i> mitochondrion, complete genome	0	83.14	1507	990
CP_COX1I5	KP137411	<i>Diaporthe longicolla</i> mitochondrion, complete genome	7.405E-173	91.37	2545	503

CP_COX1I6	FO906979	<i>Leptosphaeria maculans brassicae</i>	0	79.12	1328	1333
CP_COX1I7	JN007486	<i>Chaetomium thermophilum</i> var. <i>thermophilum</i> strain DSM 1495 mitochondrion, complete genome	6.942E-148	71.18	1342	1061
CP_COX1I8	XM_007720497	<i>Bipolaris zeicola</i> 26-R-13 hypothetical protein partial mRNA	4.117E-62	78.31	1531	340
CP_NAD2I1	KC832409	<i>Botryotinia fuckeliana</i> B05.10 mitochondrion, complete genome	0	83.65	1608	924
CP_NAD2I2	KF545917	<i>Annulohyphoxylon stygium</i> mitochondrion, complete genome	0	96.77	1458	1258
CP_NAD2I3	JX271275	<i>Agaricus bisporus</i> var. <i>bisporus</i> H97 mitochondrion, complete genome	4.256E-110	80.76	2479	882
CP_NAD2I4	Z69899	<i>P.comata</i> mitochondrial cox1 gene	6.339E-32	85.93	2577	470
CP_NAD2I5	KR011238	<i>Fusarium graminearum</i> strain CBS 104.09 mitochondrion, complete genome	0	81.63	1525	1278
CP_NAD2I6	XM_003342324	<i>Sordaria macrospora</i> k-hell hypothetical protein (SMAC_12650), mRNA	1.927E-171	84.84	1113	574
CP_COX2I1	FO906979	<i>Leptosphaeria maculans brassicae</i>	4.632E-179	92.00	1541	805
CP_COX2I2	KJ434027	<i>Sclerotinia borealis</i> strain F-4128 mitochondrion, complete genome	1.52E-96	89.18	624	356
CP_COX2I3	KJ434027	<i>Sclerotinia borealis</i> strain F-4128 mitochondrion, complete genome	0	87.35	3748	1032
CP_COX2I4	KC832409	<i>Botryotinia fuckeliana</i> B05.10 mitochondrion, complete genome	0	87.93	1908	1051
CP_NAD5I1	AF456838	<i>Cryphonectria parasitica</i> isolate Ep 155 NADH-ubiquinone oxireductase subunit 4 (ND4) gene, complete cds; NADH-ubiquinone oxireductase subunit 5, ND5 intron 1 protein and ND5 intron 2 protein (ND5) gene, complete cds; ATPase 8 gene, complete cds; and ATPase 6 gene, partial cds; mitochondrial genes for mitochondrial products	0	99.90	2091	2093
CP_NAD5I2	AF456838	<i>Cryphonectria parasitica</i> isolate Ep 155 NADH-ubiquinone oxireductase subunit 4 (ND4) gene, complete cds; NADH-ubiquinone oxireductase subunit 5, ND5 intron 1 protein and ND5 intron 2 protein (ND5) gene, complete cds; ATPase 8 gene, complete cds; and ATPase 6 gene, partial cds; mitochondrial genes for mitochondrial products	0	100	2400	2400

CP_ATP6I1	AF218567	<i>Cryphonectria parasitica</i> putative maturase (maturase) gene, complete cds; mitochondrial gene for mitochondrial product	0	99.78	2735	2366
CP_ATP6I2	KF545917	<i>Annulohyphoxylon stygium</i> mitochondrion, complete genome	0	78.13	1710	1135
CP_ATP6I3	FO905844	<i>Leptosphaeria biglobosa</i> Thlaspii ibcn65_scaffold00057 complete sequence	0	93.93	3362	1030
CP_COX3I1	AF456845	<i>Cryphonectria parasitica</i> isolate I-12b NADH-ubiquinone oxireductase subunit 5, ND5 group II intron protein and ND5 intron 2 protein (ND5) gene, partial cds; mitochondrial gene for mitochondrial product	1.513E-23	84.68	942	148
CP_COX3I2	KF545917	<i>Annulohyphoxylon stygium</i> mitochondrion, complete genome	1.715E-149	78.64	1178	917
CP_COX3I3	JX185564	<i>Ceratocystis cacaofunesta</i> mitochondrion, complete genome	8.373E-8	88.57	492	98
CP_COX3I4	JN041209	<i>Fusarium solani</i> mitochondrion, complete genome	0	85.36	2577	1140
CP_COX3I5	KT283062	<i>Sclerotinia sclerotiorum</i> 1980 UF-70 mitochondrion, complete genome	2.106E-97	93.33	724	374
CP_NAD1I1	KJ434027	<i>Sclerotinia borealis</i> strain F-4128 mitochondrion, complete genome	0	79.72	3577	1427