

Supplementary Table S4 Terpenoid and ergosterol biosynthesis related enzymes in *Inonotus obliquus* genome.

Top Annotation	Gene ID	Species	E ^{Value}	Accession Number
Acetyl-CoA acetyltransferase	g4782	<i>Sparassis crispa</i>	e ⁻¹⁷¹	XP_027610232.1
	g5768		1e ⁻⁰⁵⁴	XP_027610232.1
	g2547		9e ⁻⁰⁵²	XP_027610232.1
	g5993		5e ⁻⁰⁴⁸	XP_027610232.1
3-hydroxy-3-methyl glutaryl-CoA synthase	g1923	<i>Neurospora crassa</i>	3e ⁻⁰⁶²	BAJ83614.1
3-hydroxy-3-methyl glutaryl-CoA reductase	g3754	<i>Neurospora crassa</i>	e ⁻¹⁵³	BAJ83615.1
mevalonate kinase	g9045	<i>Cordyceps javanica</i>	9e ⁻⁰⁶⁸	TQV90862.1
	g7463	<i>Cordyceps javanica</i>	9e ⁻⁰⁶⁸	TQV90862.1
phosphomevalonate kinase	g11342	<i>Saccharomyces cerevisiae</i>	5e ⁻⁰⁵⁰	NP_013947.1
mevalonate pyrophosphate decarboxylase	g11254	<i>Sanghuangporus baumii</i>	e ⁻¹⁷⁴	QDM54308.1
isopentenyl diphosphate isomerase	g6202	<i>Ganoderma lucidum</i>	e ⁻¹²⁰	AGL94943.1
Geranylgeranyl diphosphate synthase	g7179	<i>Penicillium chrysogenum</i>	1e ⁻⁰⁵⁴	BBD06033.1
farnesyl diphosphate synthase	g8793	<i>Ganoderma lucidum</i>	3e ⁻⁰⁵⁵	ACB37021.1
squalene synthase	g1629	<i>Ganoderma lucidum</i>	e ⁻¹⁶¹	ABF57213
squalene epoxidase	g1801	<i>Polyporus arcularius</i>	e ⁻¹⁶⁷	TFK94486.1
lanosterol synthase	g2189	ERG7	0	QHB09064.1
lanosterol 14 α -demethylase	g5147	ERG11	e ⁻¹²⁶	NP_011871.1
lanosterol 14 α -demethylase	g9278	ERG11	e ⁻¹²⁵	NP_011871.1
delta(14)-sterol reductase	g11112	ERG24	e ⁻¹⁰²	NP_014119.1
delta(14)-sterol reductase	g11111	ERG24	2e ⁻⁰⁶²	NP_014119.1
methylsterol monooxygenase	g3079	ERG25	8e ⁻⁰⁹⁷	NP_011574.3
methylsterol monooxygenase	g7372	ERG25	3e ⁻⁰⁹⁴	NP_011574.3
methylsterol monooxygenase	g9095	ERG25	5e ⁻⁰⁶⁹	NP_011574.3
sterol-4-alpha-carboxylate 3-dehydrogenase	g9014	ERG26	2e ⁻⁰³⁸	NP_011514.1
3-keto-steroid reductase	g4225	ERG27	3e ⁻⁰²⁵	NP_013201.1
sterol 24-C-methyltransferase	g8328	ERG6	3e ⁻⁰⁹⁸	NP_013706.1
sterol 24-C-methyltransferase	g8867	ERG6	1e ⁻⁰³³	NP_013706.1
sterol 24-C-methyltransferase	g1616	ERG6	1e ⁻⁰²⁷	NP_013706.1
C-8 sterol isomerase	g7941	ERG2	6e ⁻⁰⁴⁸	NP_013929.1
C-5 sterol desaturase	g9337	ERG3	2e ⁻⁰⁶⁶	NP_013157.1
C-22 sterol desaturase	g6317	ERG5	2e ⁻⁰⁸⁵	NP_013728.1
delta(24(24(1)))-sterol reductase	g1987	ERG4	4e ⁻⁰⁹⁴	NP_011503.1
Terpenoid synthase	g1456	<i>Agrocybe aegerita</i>	3e ⁻⁶⁹	QGA30884.1
	g1445		2e ⁻⁶⁶	QGA30884.1
	g1440		1e ⁻⁶⁵	QGA30884.1
	g1454		3e ⁻⁶⁴	QGA30884.1
	g1451		1e ⁻⁶¹	QGA30884.1
	g9044		6e ⁻⁵⁹	QGA30884.1
	g7464		4e ⁻⁴³	QGA30884.1
	g6603		3e ⁻³⁵	QGA30884.1
	g1458		4e ⁻³³	QGA30884.1
	g6614		4e ⁻³²	QGA30884.1
	g6608		6e ⁻³⁰	QGA30884.1
	g6631		9e ⁻²⁹	QGA30884.1

g6636	5e ⁻²⁶	QGA30884.1
g6629	1e ⁻²⁴	QGA30884.1
g1439	2e ⁻²⁴	QGA30884.1
g6607	8e ⁻²⁴	QGA30884.1
g6613	5e ⁻¹⁹	QGA30884.1
g3395	9e ⁻¹⁰	QGA30884.1
g3648	e ⁻¹³⁷	XP_036627630.1
g8354	2e ⁻⁰⁷³	XP_036627630.1
