

Functional Gene Pipeline Tutorial 1

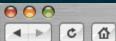


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Part I - BASIC FUNCTIONS

- Basic features
- Display options
- Sorting options
- Filter options



+ ttp://flyingcloud.cme.msu.edu/fungene/



Functional Gene Pipeline/Repository

Begin with these gene links:

Version 2.1 -- GenBank Rel. 155.0 (as of 10 Sept 06) Access archived gene files here

Antib	lotic resistances	
gene	contributor	
intI	Carlos Rodriguez-Minguel	
tetM	Carlos Rodriguez-Minguel	
tetQ	Carlos Rodriguez-Minguel	
tetW	Carlos Rodriguez-Minguel	

AA

What is the Functional Gene Pipeline/Repository (FGPR)?	
(and other important FAQs)	

Biodegradation

gene	contributor	
benA	Stephan Gantner	
bph	Gerben Zylstra	
bphA1	Stephan Gantner	
bphA2	Stephan Gantner	
cprA	Tamara Tsoi Cole	
cprB	Tamara Tsoi Cole	
npaH	Gerben Zylstra	
ppaH	Gerben Zylstra	

ochemical cycle	25
contributor	
Alexander	Loy/Michael Wagner
Alexander Loy	/Michael Wagner
RBAlexander Loy	/Michael Wagner
Blaz Stres	
Laurent Philipp	pot
Laurent Philipp	pot
Gesche Braker	
Veronica Grun	tzig
Gesche Braker	
Blaz Stres	
Joel Klappenba	ch
	contributor Alexander Alexander Loy, rB Alexander Loy, Blaz Stres Laurent Philipp Laurent Philipp Gesche Braker Veronica Grund Gesche Braker

Phylogentic markers

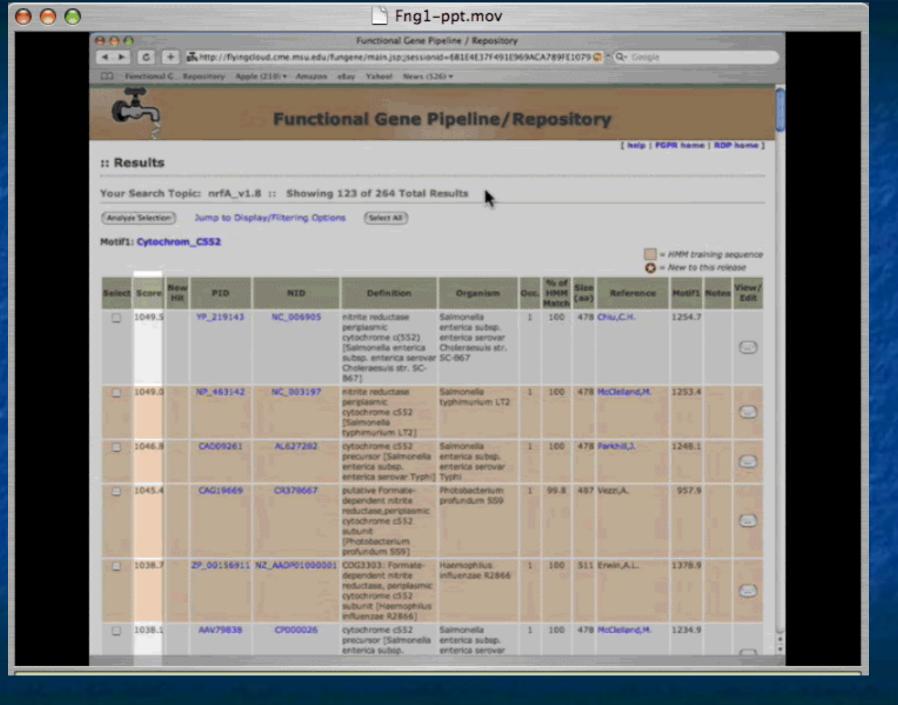
gene	contributor
fusA	Scott Santos/Howard Ochman
ileS	Scott Santos/Howard Ochman
lepA	Scott Santos/Howard Ochman
leuS	Scott Santos/Howard Ochman
pyrG	Scott Santos/Howard Ochman
recA	Scott Santos/Howard Ochman
recG	Scott Santos/Howard Ochman
rplB	Scott Santos/Howard Ochman
rpoB	Scott Santos/Howard Ochman

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C		1046.8		CAD09261	AL627282	cytochrome c552 precursor [Salmonella enterica subsp. enterica serovar Typhi]	Salmonella enterica subsp. enterica serovar Typhi	1	100	478	Parkhill, J.	1248.1	1 60	9
•	1	1045.4		CAG19669	CR378667	putative Formate- dependent nitrite reductase,periplasmic cytochrome c552 subunit [Photobacterium profundum S59]	Photobacterium profundum 559	1	99.8	487	Vezzi,A.	957.9		•
-		1038.7		ZP_00156911	NZ_AADP01000001	COG3303: Formate- dependent nitrite reductase, periplasmic cytochrome c552 subunit (Haemophilus influenzae R2866)	Haemophilus Influenzae R2866	1	100	511	Erwin,A.L.	1378.9		٢
		1038.1		AAV79838	CP000026	cytochrome c552 precursor [Salmonella enterica subsp.	Salmonella enterica subsp. enterica serovar	1	100	478	McClelland, M.	1234.9		0

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0	1049.0		NP_463142	NC_003197	nitrite reductase periplasmic cytochrome c552 [Salmonella typhimunium LT2]	Salmonella typhimurium LT2	1	100	478	McCleland, M.	1253.4		0
0	1046.8		CAD09261	AL627282	cytochrome c552 precursor [Salmonella enterica subsp. enterica serovar Typhi]	Salmonella enterica subsp. enterica serovar Typhi	1	100	478	Parkhill,3.	1248.1	i.	•
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•	1038.7		ZP_00156951	NZ_AADP01000001	CDG3303: Formate- dependent nitrite reductase, periplasmic cytochrome c552 subunit [Haemophilus influenzae R2866]	Haemophilus influenzae R2866	1	100	511	Erwin,A.L.	1378.9		•
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0	1049.0	NP_46314	12 NC_003197	nitrite reductase periplasmic cytochrome c552 [Salmonelia typhimurium LT2]	Salmonella typhimurium LT2	1	100	478 McClelland,	4 1253.4	0
0	1046.8	CAD0926	1 AL627282	cytochrome c552 precursor [Salmonella enterica subsp. enterica serovar Typhi]	enterica serovar	1	100	478 Parkhill,3.	1248.1	0
0	1045.4	CAG1966	9 CR378667	putative Formate- dependent nitrite reductase,periplasmic cytochrome c552 subunit (Photobacterium profundum 559)	Photobacterium profundum 559	1	99.8	487 Vezzi,A.	957.9	•
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0	1049.5		YP_219143	NC_006905	nitrite reductase periplasmic cytochrome c(552) (Salmonella enterica subsp. enterica serovar Choleraesuis str. SC- B67)	Salmonella enterica subsp. enterica serovar Choleraesuis str. SC-867	1	100	478	оњ,сн.	1254.7	Ō
0	1049.0		NP_463142	NC_003197	nitrite reductase periplasmic cytochrome c552 [Salmonella typhimurium LT2]	Salmonella typhimurium LT2	1	100	478	McClefand,M.	1253.4	0
	1046.8		CAD09261	AL627282	cytochrome c552 precursor [Salmonella enterica subsp. enterica serovar Typhi]	Salmonella enterica subsp. enterica serovar Typhi	1	100	478	Parkhill,J.	1248.1	9
٥	1045.4		CAG19669	CR378667	putative Formate- dependent nitrite reductase,periplasmic cytochrome c552 subunit [Photobacterium profundum S59]	Photobacterium profundum SS9	1	99.8	487	Vezzi,A.	957.9	•
0	1038.7		ZP_00156911	NZ_AADP01000001	CDG3303: Formate- dependent nitrite reductase, periplasmic cytochrome c552 subunit [Haemophilus influenzae R2866]	Haemophilus Influenzae R2866	1	100	511	Erwin,A.L.	1378.9	0
0	1038.1		AAV79838	CP000026	cytochrome c552 precursor [Salmonella enterica subsp.	Salmonella enterica subsp. enterica serovar	1	100	478	McCleland,M.	1234.9	



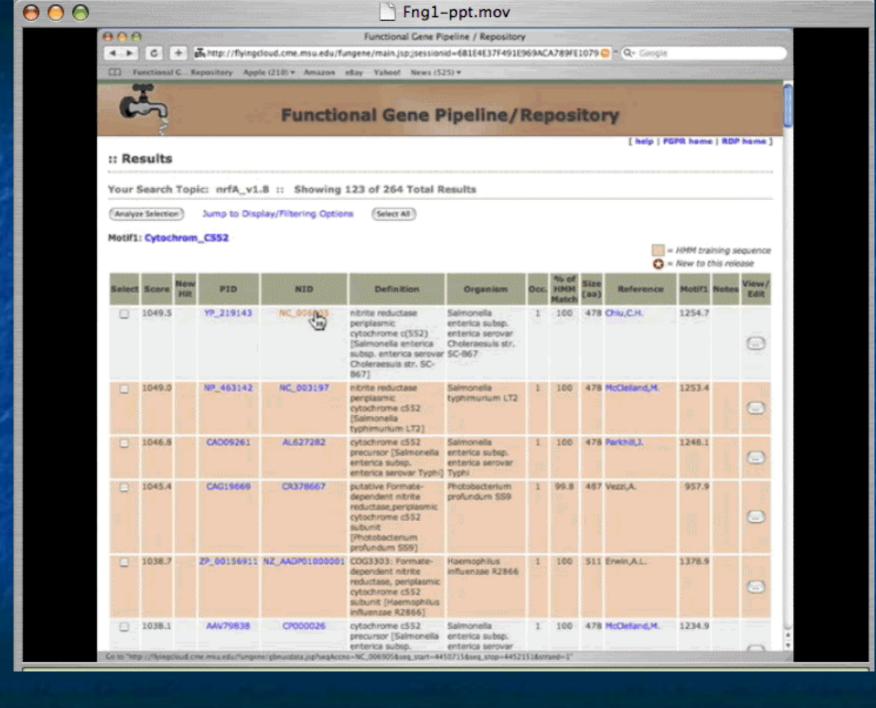
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0	1049.0		NP_463142	NC_003197	nitrite reductase periplasmic cytochrome c552 [Salmonella typhimurium LT2]	Salmonella typhimurium LT2	1	100	478	McClefland,M.	1253.4		•
8	1046.8		CAD09261	AL627282	cytochrome c552 precursor [Salmonella enterica subsp. enterica serovar Typhi]	Salmonella enterica subsp. enterica serovar Typhi	1	100	478	Parkhil,J.	1248.1		•
0	1045.4		CAG19669	CR378667	putative Formate- dependent nitrite reductase,periplasmic cytochrome c552 subunit (Photobacterium profundum S59)	Photobacterium profundum SS9	1	99.8	487	Vezzi,A.	957.9		•
0	1038.7		ZP_00156911	NZ_AADP01000001	CDG3303: Formate- dependent nitrite reductase, periplasmic cytochrome c552 subunit [Haemophilus influenzae R2866]	Haemophilus Influenzae R2866	1	100	511	Erwin,A.L.	1378.9		•
0	1038.1		AAV79838	CP000026	cytochrome c552 precursor [Salmonella enterica subsp.	Salmonella enterica subsp. enterica serovar	1	100	478	McClelland,M.	1234.9		-

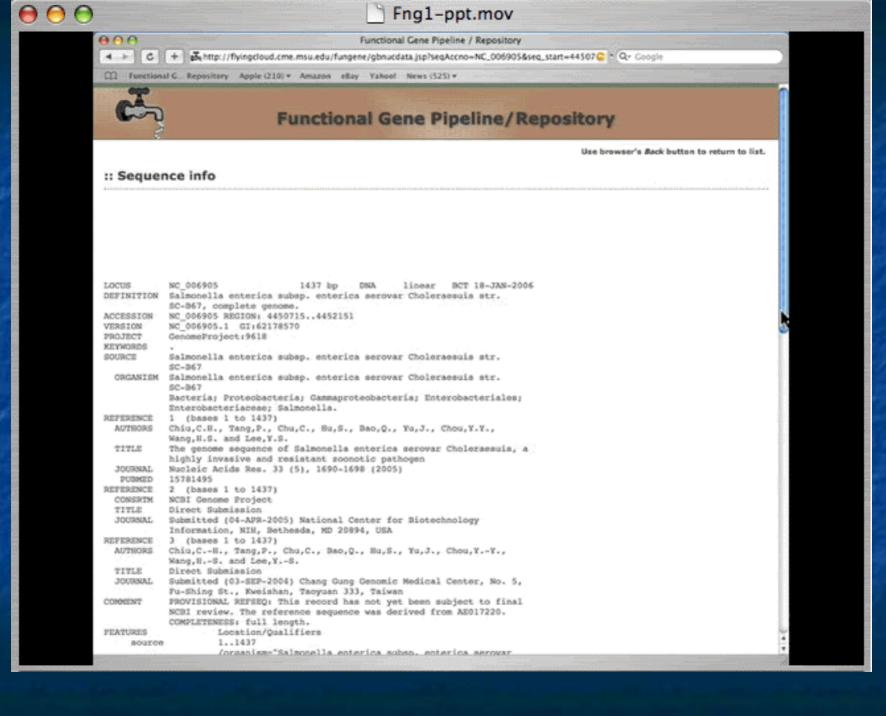
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		874.9	AAW35982	CP000025	subsp. jejuni CF93-6] cytochrome c552 [Campylobacter jejuni RM1221]	Campylobacter	1	100	610	Pouts,D.E.	156.9	0	
	0	874.2	ZP_01070960	NZ_AANQ01000001		Campylobacter jejuni subsp. jejuni H893-13	1	100	610	Pouts,D.	156.9	0	
		671.7	AA595106	AE017285	cytochrome c nitrite reductase, catalytic subunit NIrA, putative [Desulfovibrio vulgaris subsp. vulgaris str. Hidenborough]		1	100	524	Heldelberg,1.F.	160.3	•	
	8	6.938	ZP_01069351	NZ_AANK01000001	cytochrome c552 [Campylobacter jejuni subsp. jejuni 260.94]		+	100	610	Fouts,D.	154.3	0	
		863.7	10AH5		Chain B, Cytochrome C Nerite Reductase From Desulfivitorio Desulfivitorions Acc 27774: The Relevance Of The Two Caldium Sites In The Structure Of The Catalytic Subunit (Refa).		1	100	519	Contra,C	149.4	0	
	. <u>0</u> .:	857.8	ZP_00640360	NZ_AADV01000029	NEribe reductase (cytochrome; ammonia-forming) (Shewanella frigidimarina NCIMB 400)	Shewarela frigidimarina NCIMB 400	1	82	394	Copeland,A.	830.7	0	
	0	82	27 1313176	NZ_AAEW02000013		Desulfuromonas acetoxidans DSM 684	1	100	500	Copeland,A.	837.9	Θ	
	۰	854.5	CA087646	A3316232	cytochrome c nitrite reductase catalytic subunit (Desulfovibrio desulfuricans)	Desulfovbrio desulfunicans	1	99.8	514	Curta,C	149.4		
		847.0	CAG35073	CR522870	probable catalytic subunit of cytochrome c nitrite reductase [Desulfotalea psychrophila LSv54]	Desulfotalea psychrophila LSv54	1	100	508	Rabus, R.	849.1	0	
	9	821.5	ZP_00367407	NZ_AAFL01000002	probable periplasmic cytochrome C CJ1357c [Campylobacter coll RM2228]		1	100	610	Fouts,D.E.	151.9	\odot	

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0	1049.5		YP_219143	NC_006905	nitrite reductase periplasmic cytochrome c(552) (Salmonella enterica subsp. enterica serovar Choleraesuis str. SC- B67)	Salmonella enterica subsp. enterica serovar Choleraesuis str. SC-867	1	100	478	оњ,сн.	1254.7	Ō
0	1049.0		NP_463142	NC_003197	nitrite reductase periplasmic cytochrome c552 [Salmonella typhimurium LT2]	Salmonella typhimurium LT2	1	100	478	McClefand,M.	1253.4	0
	1046.8		CAD09261	AL627282	cytochrome c552 precursor [Salmonella enterica subsp. enterica serovar Typhi]	Salmonella enterica subsp. enterica serovar Typhi	1	100	478	Parkhill,J.	1248.1	9
٥	1045.4		CAG19669	CR378667	putative Formate- dependent nitrite reductase,periplasmic cytochrome c552 subunit [Photobacterium profundum S59]	Photobacterium profundum SS9	1	99.8	487	Vezzi,A.	957.9	•
0	1038.7		ZP_00156911	NZ_AADP01000001	CDG3303: Formate- dependent nitrite reductase, periplasmic cytochrome c552 subunit [Haemophilus influenzae R2866]	Haemophilus Influenzae R2866	1	100	511	Erwin,A.L.	1378.9	0
0	1038.1		AAV79838	CP000026	cytochrome c552 precursor [Salmonella enterica subsp.	Salmonella enterica subsp. enterica serovar	1	100	478	McCleland,M.	1234.9	

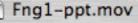
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U	1043-2		YP_219143	MC_006903	nitrite reductase periplasmic cytochrome (\$52) (Salmonella enterica subsp. enterica serovar Choleraesuis str. SC- 867]	Satmonella enterica subsp. enterica serovar Choleraesuis str. SC-867	I	100	478 Chu,C.H.	1694.7	0
	1049.0		NP_463142	NC_003197	nitrita reductase periplasmic cytochrome (552 [Salmonella typhimurium 1,72]	Salmonella typhimurium LT2	1	100	478 McClefand)	4. 1253.4	9
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8	1045.4		CAG19669	CR378667	putative Formate- dependent nitrite reductase, periplasmic cytochrome c552 subunit [Photobecterium profundum 559]	Photobacterium profundum 559	1	99.8	487 Vezzi,A.	957.9	•
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0	1045.4		CAG19669	CR378667	putative Pormate- dependent nitrite reductase, peripassnic cytochrome 2552 subunit [Photobactienium profundum 559]	Photobacterium profundum 559	25 25 4	99.8	487 Vezzi,A.		957.9	•
	1038.7		29_00156911	NZ_AADP01000001	COG3303. Formabe- dependent nitrite reductase, perplasmic cytochrome c552 subunit (Heemophilus influenzee R2866)	Haemophilus Influenzae R2866	A month of	100	S11 Erwin,A.I		1378.9	•
8	1038.1		AAV79838	CP000026	cytochrome c552 precursor [Selmonella enterica subsp.	Salmonella enterica subsp. enterica serovar	1	100	478 McClellan	ά,Μ.	1234.9	





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