Output results of CLIME (CLustering by Inferred Models of Evolution)

Dataset:

Num of genes in input gene set: 15
Total number of genes: 20834
Prediction LLR threshold: 0

The CLIME PDF output two sections:

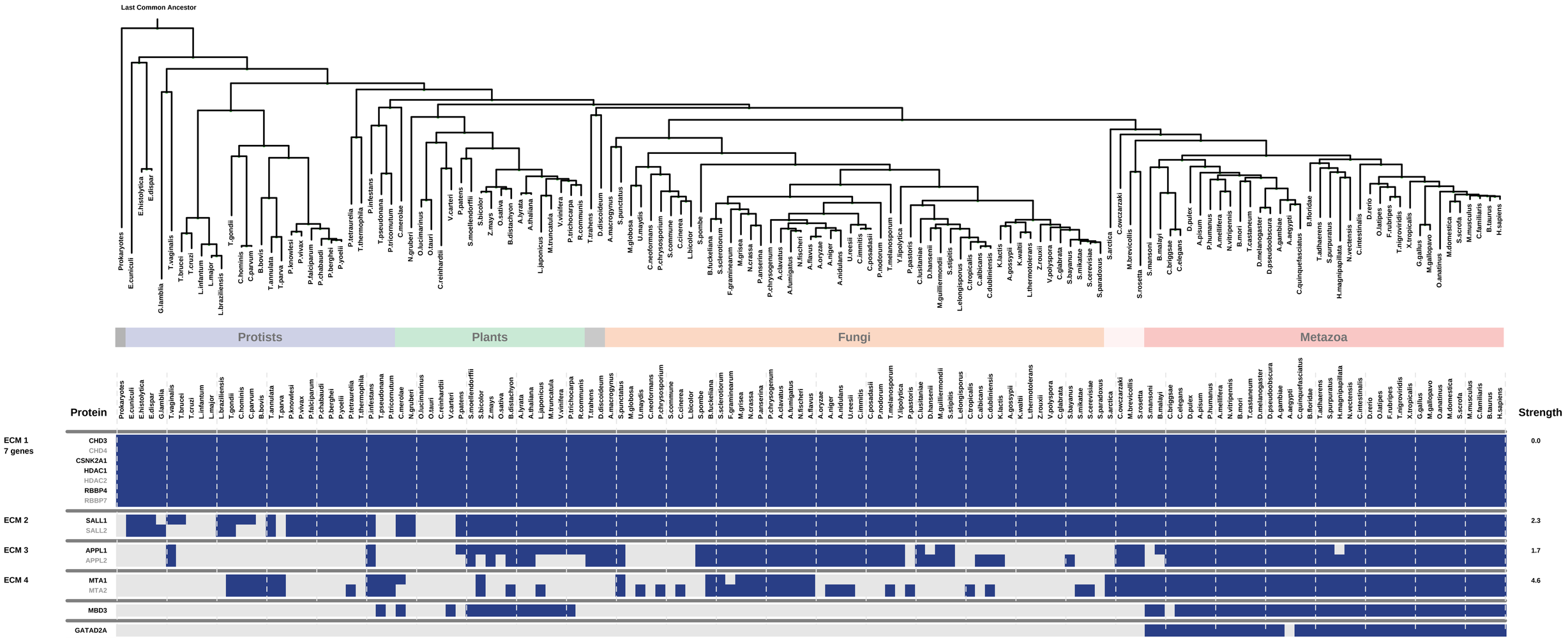
1) Overview of Evolutionarily Conserved Modules (ECMs)

- Top panel shows the predefined species tree.
- Bottom panel shows the partition of input genes into Evolutionary Conserved Modules (ECMs), ordered by ECM strength (shown at right), and separated by horizontal lines.
- Each row show one gene, where the phylogenetic profile indicates presence (blue) or absence (gray) of homologs in each species (column).
- Gene symbols are shown at left. Gray color indicates that the gene is a paralog to a higher scoring gene within the same ECM (based on BLASTP E < 1e-3).

2) Details of each ECM and its expansion ECM+

- Top panel shows the inferred evolutionary history on the predefined species tree. Branch color shows the gain event (blue) and loss events (red color, with brighter color indicating higher confidence in loss). Branches before the gain or after a loss are shown in gray.
- Bottom panel shows the input genes that are within the ECM (blue/white rows) as well as all genes in the expanded ECM+ (green/gray rows). The ECM+ includes genes likely to have arisen under the inferred model of evolution relative to a background model, and scored using a log likelihood ratio (LLR).
- PG indicates "paralog group" and are labeled alphabetically (i.e., A, B). The first gene within each paralog group is shown in black color. All other genes sharing sequence similarity (BLAST E < 1e-3) are assigned to the same PG label and displayed in gray.

Overview of Evolutionarily Conserved Modules (ECMs)

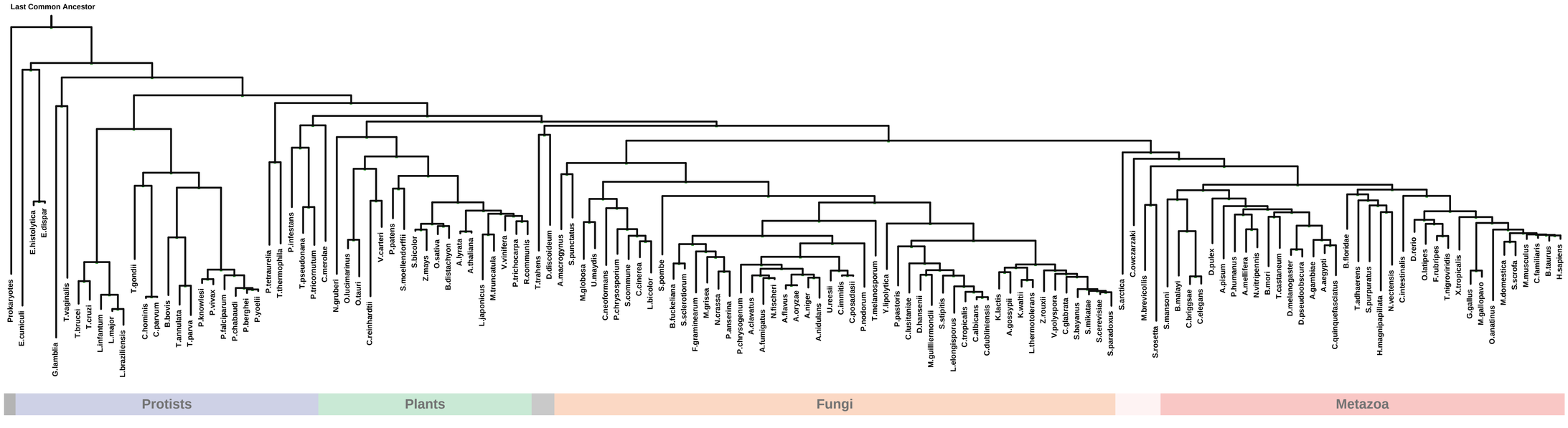


ECM 1, Gene set "NuRD complex", Page 1

Num of ECM Genes: 7. Num of Predicted Genes: 0. ECM Strength: 0.0

PRESENCE — GAIN — ABSENCE — LOSS

Log-likelihood Ratio Scale: 0 10 20 30 40 50 60



PG	Protein	LLR	Notes
A	CHD3		1 / 2
A	CHD4		2
	CSNK2A1		2 / 3 / 4
B	HDAC1		2 / 4 / 5
B	HDAC2		2 / 4 / 6 / 7 / 8
C	RBBP4		2 / 4 / 6 / 9 / 10
C	RBBP7		2 / 6

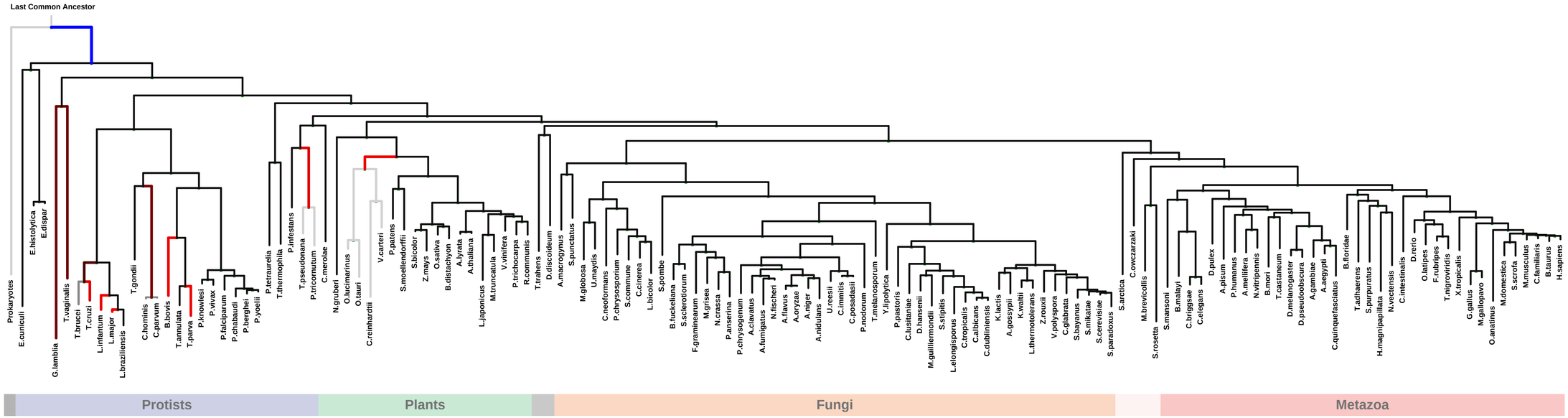
1: intermediate filament cytoskeleton || 2: NuRD complex || 3: PcG protein complex || 4: Sin3 complex || 5: histone deacetylase complex || 6: ESC/E(Z) complex || 7: heterochromatin || 8: replication fork || 9: CAF-1 complex || 10: NURF complex

ECM 2, Gene set "NuRD complex", Page 1

Num of ECM Genes: 2. Num of Predicted Genes: 500. ECM Strength: 2.3

PRESENCE — GAIN — ABSENCE — LOSS

Log-likelihood Ratio Scale: 0 10 20 30 40 50 60



PG	Protein	LLR	Notes
A	**SALL1**		1 / 2 / 3
A	SALL2		3
A	PRDM1	46.6	
A	ZNF23	43.3	
A	ZNF263	43.3	4
A	SALL3	42.5	
A	FIZ1	42.5	
A	PRDM12	42.5	
A	ZNF784	42.5	
A	SP4	42.0	
A	ZBTB6	40.9	
A	IKZF4	40.9	
A	SP3	39.7	5 / 6
A	IKZF1	39.7	7
A	ZNF80	39.2	
A	OVOL2	38.8	
A	ZNF281	38.2	
A	ZBTB42	38.1	
A	ZNF793	37.7	
A	PRDM6	37.7	
A	ZFAT	37.3	
A	SP5	37.0	
A	ZNF705A	36.6	
A	ZNF705D	36.6	
A	ZNF705E	36.6	
A	ZNF705B	36.6	
A	ZNF319	36.6	
A	ZNF683	36.6	
A	SP1	36.5	8
A	ZNF445	35.9	
A	ZNF555	35.6	
A	LOC100131479	35.3	
A	ZNF335	35.0	
A	REST	34.9	6 / 9
A	ZNF740	34.2	

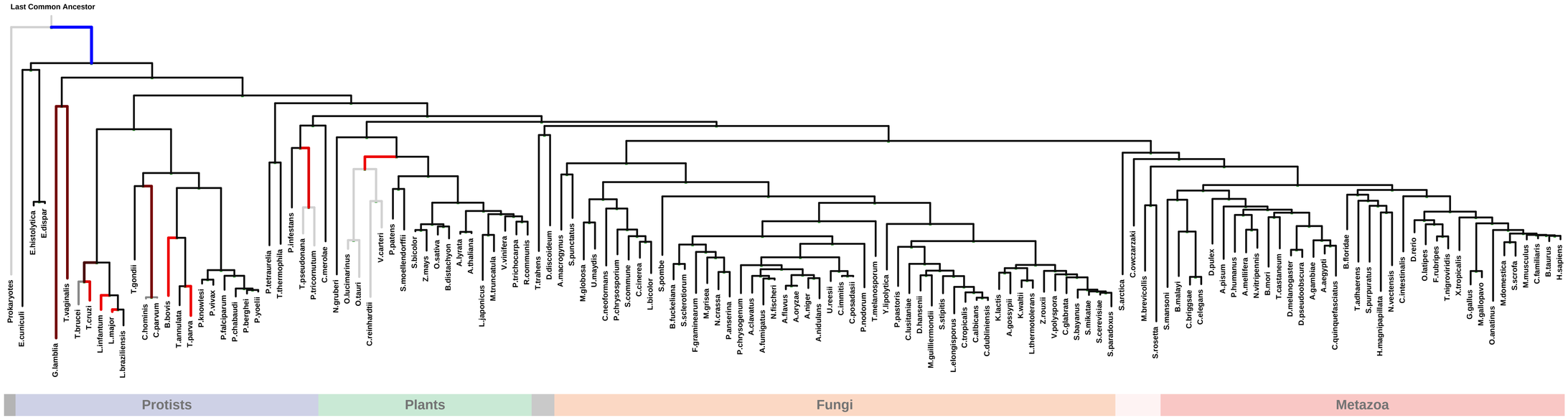
1: chromocenter || 2: heterochromatin || 3: NuRD complex || 4: microtubule cytoskeleton || 5: PML body || 6: transcriptional repressor complex || 7: centromeric heterochromatin || 8: protein-DNA complex || 9: chromatin

ECM 2, Gene set "NuRD complex", Page 2

Num of ECM Genes: 2. Num of Predicted Genes: 500. ECM Strength: 2.3

PRESENCE — GAIN — ABSENCE — LOSS

Log-likelihood Ratio Scale: 0 10 20 30 40 50 60



PG	Protein	LLR	Notes
A	ZNF521	34.1	
A	ZNF524	34.0	
A	REPIN1	33.4	1
A	ZBTB7B	33.4	
A	GLI4	33.4	
A	ZNF284	33.4	
A	ZFP64	33.4	
A	ZNF774	33.4	
A	ZNF559	33.4	
A	ZNF599	33.4	
A	ZNF629	33.4	
A	ZNF230	32.5	
A	ZNF24	32.5	
A	ZNF341	32.5	
A	ZNF610	32.5	
A	ZBTB45	32.5	
A	ZBTB20	32.5	
A	PLAGL1	32.5	
A	SP7	32.0	
A	SALL4	32.0	2
A	ZNF653	31.5	
A	ZEB2	31.0	
A	ZNF232	30.9	
A	ZNF213	30.9	
A	ZNF75D	30.9	
A	ZNF770	30.9	
A	HIC2	30.5	3
A	ZNF491	30.0	
A	ZNF48	30.0	
A	ZNF200	30.0	
A	ZNF773	30.0	
A	SP2	29.8	
A	ZNF282	29.3	
A	SP8	29.3	
A	ZNF716	29.3	

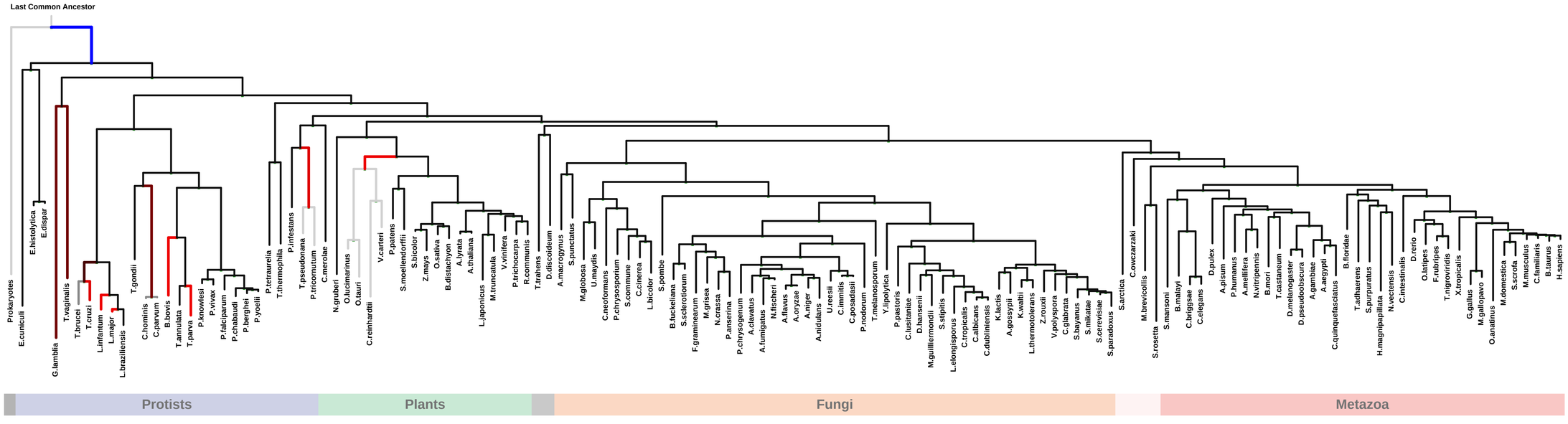
1: nuclear origin of replication recognition complex || 2: heterochromatin || 3: focal adhesion

ECM 2, Gene set "NuRD complex", Page 3

Num of ECM Genes: 2. Num of Predicted Genes: 500. ECM Strength: 2.3

PRESENCE — GAIN — ABSENCE — LOSS

Log-likelihood Ratio Scale: 0 10 20 30 40 50 60



PG	Protein	LLR	Notes
A	ZNF394	29.3	
A	SP9	29.3	
A	ZNF114	29.3	
A	ZSCAN16	29.3	
A	ZNF211	29.1	
A	MECOM	28.8	1 / 2
A	KLF13	28.8	
A	ZNF101	28.8	
A	ZNF574	28.1	
A	ZNF787	28.1	
A	ZNF589	28.1	
A	ZNF707	27.8	
A	BCL6B	27.8	
A	ZNF148	27.8	
A	ZNF552	27.7	
A	ZNF18	27.7	
A	ZNF274	27.7	
A	ZNF572	27.7	
A	ZSCAN26	27.7	
A	ZNF585A	27.7	
A	ZNF2	27.7	
A	ZNF587B	27.7	
A	ZNF605	27.7	
A	ZNF606	27.7	
A	ZNF202	27.7	
A	ZNF628	27.7	
A	ZKSCAN1	27.7	
A	ZNF10	27.7	
A	ZNF671	27.7	
A	ZNF675	27.7	
A	ZNF350	27.7	3 / 4
A	ZNF691	27.7	
A	ZNF697	27.7	
A	ZNF701	27.7	
A	ZNF382	27.7	

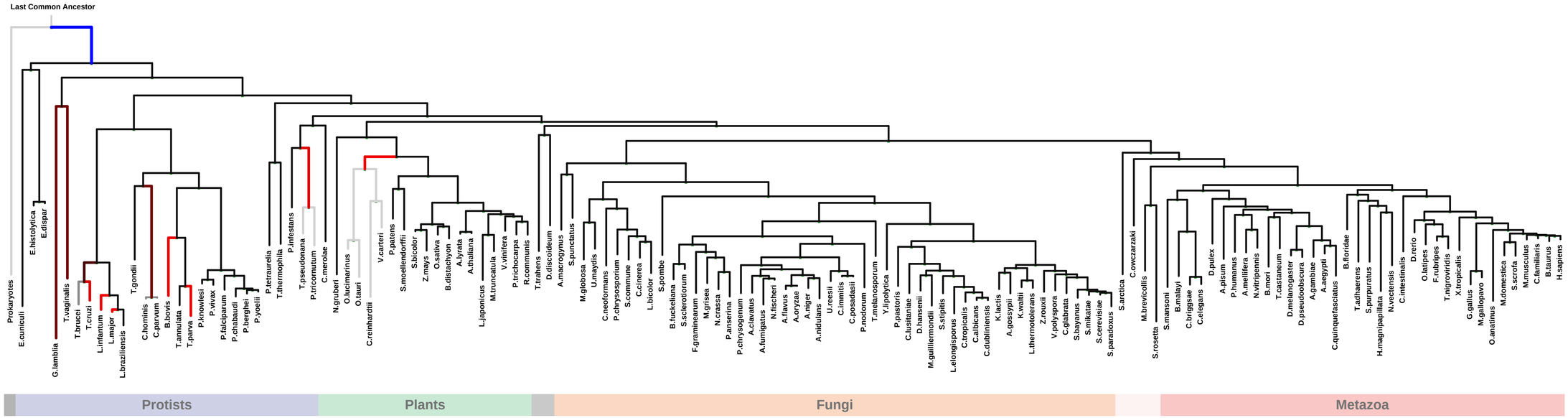
1: histone deacetylase complex || 2: nuclear speck || 3: nuclear matrix || 4: transcriptional repressor complex

ECM 2, Gene set "NuRD complex", Page 4

Num of ECM Genes: 2. Num of Predicted Genes: 500. ECM Strength: 2.3

PRESENCE — GAIN — ABSENCE — LOSS

Log-likelihood Ratio Scale: 0 10 20 30 40 50 60



PG	Protein	LLR	Notes
A	ZNF214	27.7	
A	ZNF397	27.7	
A	ZNF416	27.7	
A	ZNF708	27.7	
A	ZNF709	27.7	
A	ZNF418	27.7	
A	ZNF718	27.7	
A	ZNF224	27.7	1
A	ZNF467	27.7	
A	LOC100287477	27.7	
A	ZNF772	27.7	
A	MZF1	27.7	
A	ZNF501	27.7	
A	ZNF777	27.7	
A	ZNF506	27.7	
A	ZNF510	27.7	
A	ZFP2	27.7	
A	ZNF165	27.7	
A	ZNF835	27.7	
A	ZNF852	27.7	
A	ZNF551	27.7	
A	ZSCAN22	27.7	
A	ZSCAN23	27.7	
A	ZSCAN30	27.7	
A	ZBTB47	27.4	
A	ZNF423	27.3	
A	ZNF705G	27.3	
A	ZBTB26	27.2	
A	E4F1	27.2	2
A	ZNF366	27.2	
A	ZNF812	27.2	
A	ZNF766	26.6	
A	ZNF526	26.6	
A	ZNF497	26.6	
A	ZNF229	26.6	

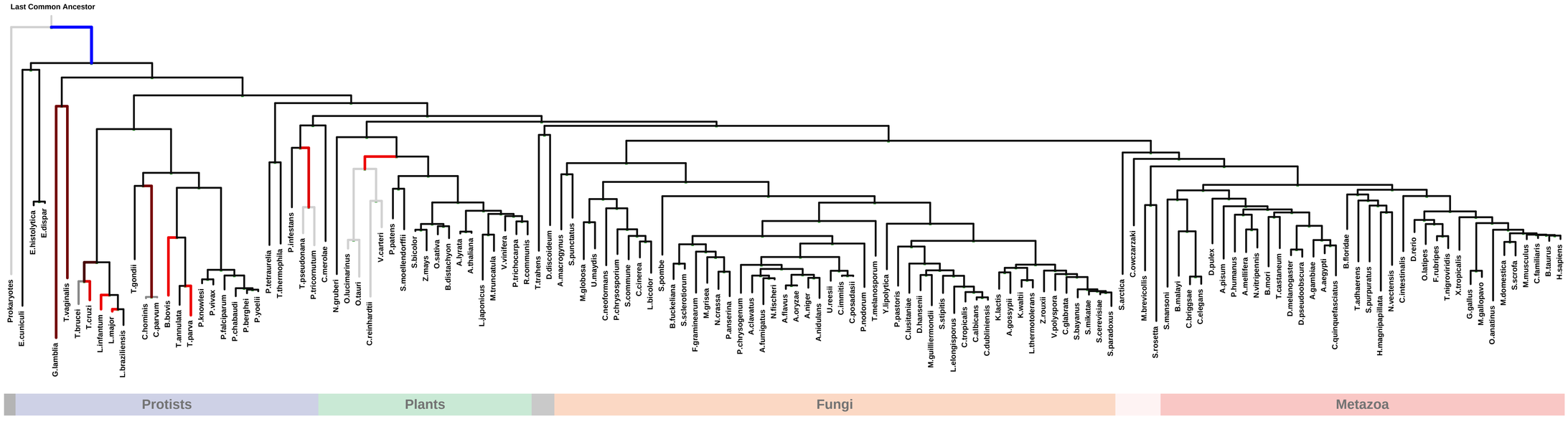
1: transcriptional repressor complex || 2: spindle

ECM 2, Gene set "NuRD complex", Page 5

Num of ECM Genes: 2. Num of Predicted Genes: 500. ECM Strength: 2.3

PRESENCE — GAIN — ABSENCE — LOSS

Log-likelihood Ratio Scale: 0 10 20 30 40 50 60



PG	Protein	LLR	Notes
A	ZNF35	26.6	1
A	ZNF251	26.6	
A	ZNF514	26.6	
A	ZNF468	26.6	
A	ZNF771	26.6	
	ZNF865	**26.6**	
A	ZNF865	26.6	
A	ZNF667	26.6	
A	ZNF354B	26.6	
A	ZFP3	26.6	
A	ZNF527	26.6	
A	ZBTB18	26.5	2
A	ZNF764	26.3	
A	ZNF711	26.1	
A	ZBTB12	26.1	
A	729863	25.8	
A	100505654	25.8	
A	PATZ1	25.7	
A	RREB1	25.7	3 / 4
A	ZNF805	25.7	
A	ZNF77	25.7	
A	ZNF566	25.7	
A	ZNF543	25.7	
A	ZNF184	25.7	
A	ZSCAN32	25.7	
A	ZNF883	25.7	
A	ZSCAN10	25.7	
A	ZNF70	25.7	
A	ZNF652	25.7	
A	ZNF177	25.7	
A	ZNF345	25.7	
A	ZNF670	25.7	
A	ZNF559-ZNF177	25.7	
A	ZNF169	25.6	
A	HKR1	25.6	

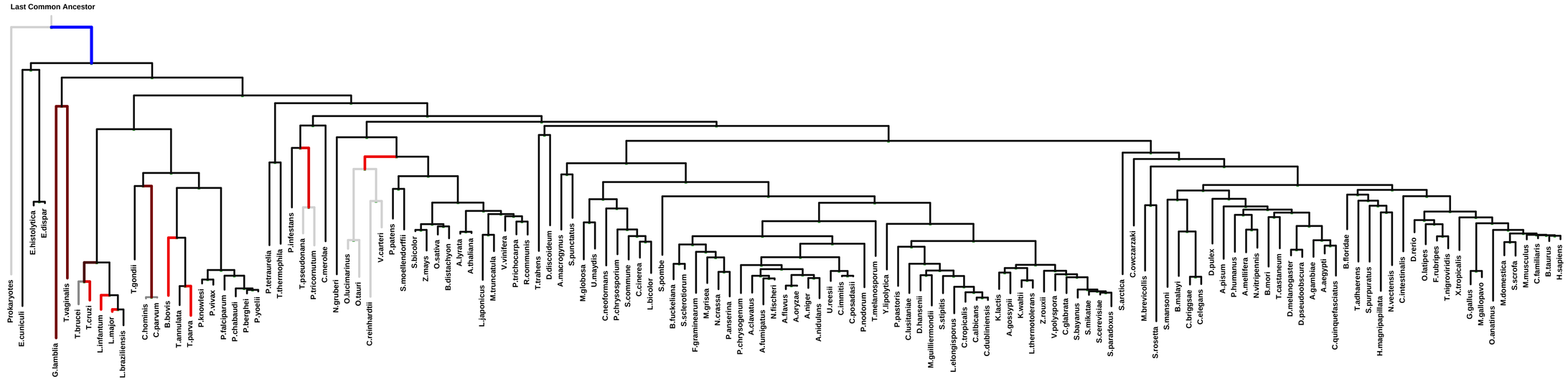
1: cell || 2: nuclear chromosome || 3: nuclear body || 4: nuclear speck

ECM 2, Gene set "NuRD complex", Page 6

Num of ECM Genes: 2. Num of Predicted Genes: 500. ECM Strength: 2.3

PRESENCE — GAIN — ABSENCE — LOSS

Log-likelihood Ratio Scale: 0 10 20 30 40 50 60



PG	Protein	LLR	Notes
A	PRDM9	25.6	1
A	ZSCAN4	25.5	2
A	PLAG1	25.4	
A	ZNF215	25.4	
A	ZNF560	25.4	
A	ZNF581	25.0	
A	ZNF444	24.8	
A	ZNF568	24.4	
A	LOC400682	24.3	
A	ZNF222	24.3	
A	ZNF662	24.1	
A	ZNF7	24.1	
A	ZNF182	24.1	
A	ZNF473	24.1	3
A	ZNF569	24.1	
A	ZNF479	24.1	
A	ZNF112	24.1	
A	ZNF484	24.1	
A	ZNF888	24.1	
A	ZFP62	24.1	
A	SNAI2	24.1	4
A	ZNF235	24.1	
A	ZNF677	24.1	
A	ZNF226	24.1	
A	ZNF79	24.1	
A	ZSCAN5B	24.1	
A	ZNF239	24.1	
A	ZNF227	24.1	
A	ZSCAN20	23.7	
A	OVOL3	23.7	
A	ZNF619	23.6	
A	IKZF3	23.6	
A	GFI1	23.5	5 / 6 / 7
A	ZNF500	23.4	
A	ZEB1	23.3	

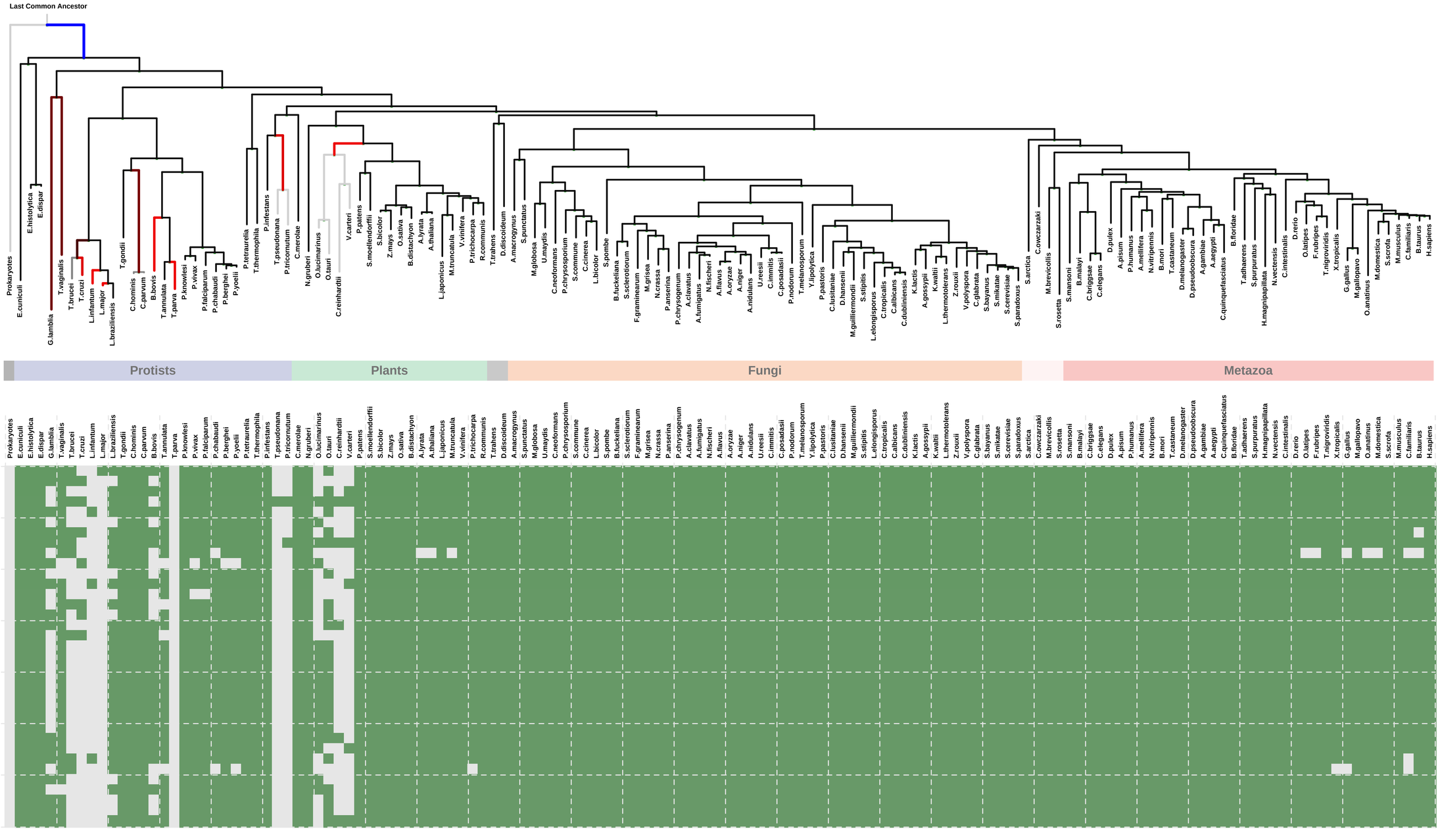
1: chromosome || 2: nuclear chromosome, telomeric region || 3: Cajal body || 4: nuclear chromatin || 5: nuclear body || 6: nuclear matrix || 7: transcriptional repressor complex

ECM 2, Gene set "NuRD complex", Page 7

Num of ECM Genes: 2. Num of Predicted Genes: 500. ECM Strength: 2.3

PRESENCE — GAIN — ABSENCE — LOSS

Log-likelihood Ratio Scale: 0 10 20 30 40 50 60

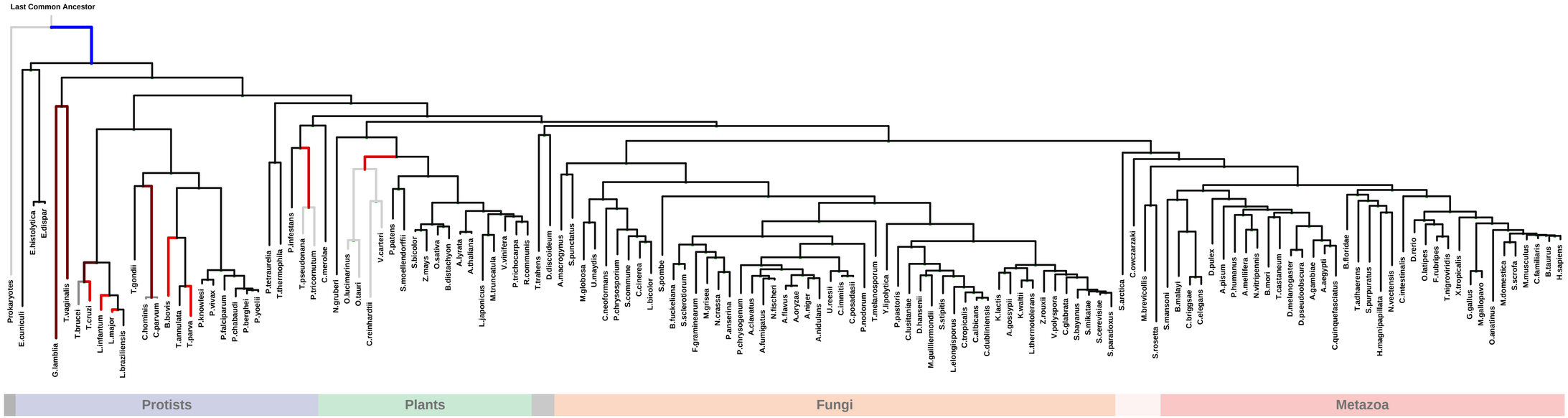


ECM 2, Gene set "NuRD complex", Page 8

Num of ECM Genes: 2. Num of Predicted Genes: 500. ECM Strength: 2.3

PRESENCE — GAIN — ABSENCE — LOSS

Log-likelihood Ratio Scale: 0 10 20 30 40 50 60



PG	Protein	LLR	Notes
	SPATA13	**20.8**	**1 / 2 / 3**
A	ZNF799	20.7	
A	ZNF396	20.5	
A	ZNF131	20.3	
A	ZNF575	20.3	
A	ZBTB10	20.3	
	ZNF783	**20.0**	
A	ZNF564	20.0	
A	ZNF792	20.0	
A	ZNF33A	20.0	
A	ZNF567	20.0	
A	ZNF658	20.0	
A	ZNF256	20.0	
A	ZNF729	20.0	
A	ZNF81	20.0	
A	ZNF134	20.0	
A	ZNF749	20.0	
A	ZNF85	20.0	
A	ZNF264	20.0	
A	ZNF266	20.0	
A	ZNF674	20.0	
A	ZNF454	20.0	
A	ZNF878	20.0	
A	ZNF578	20.0	
A	ZFP14	20.0	
A	ZNF99	20.0	
A	ZNF461	20.0	
A	ZFP1	20.0	
A	ZNF529	20.0	
A	ZNF205	20.0	
A	ZNF154	20.0	
A	ZNF132	20.0	
A	ZNF311	20.0	
A	ZNF250	20.0	
A	ZSCAN31	20.0	

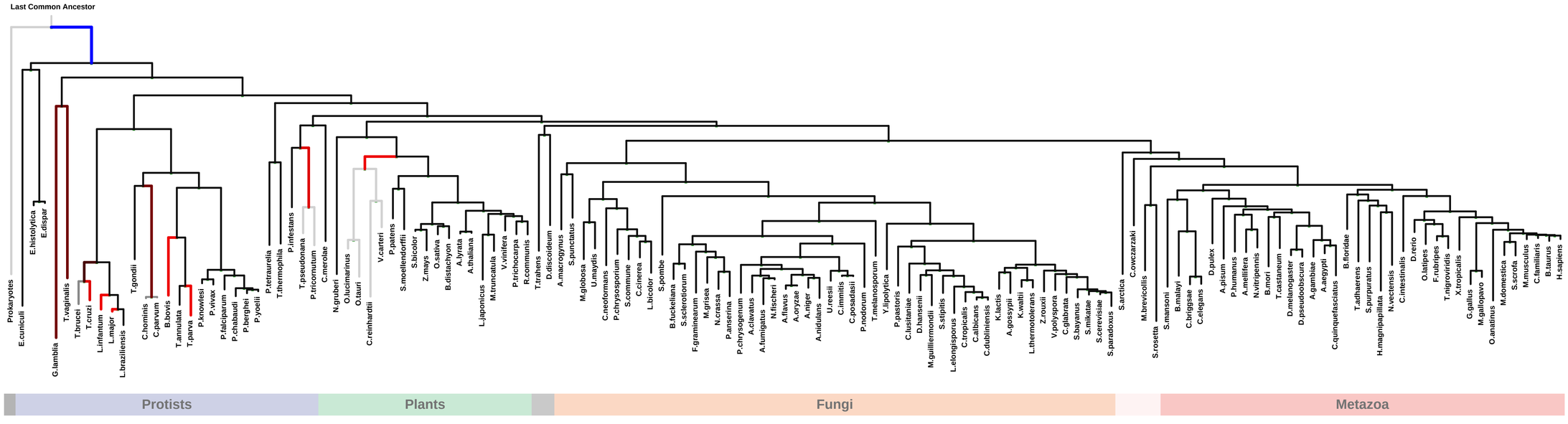
1: filopodium || 2: lamellipodium || 3: ruffle membrane

ECM 2, Gene set "NuRD complex", Page 9

Num of ECM Genes: 2. Num of Predicted Genes: 500. ECM Strength: 2.3

PRESENCE — GAIN — ABSENCE — LOSS

Log-likelihood Ratio Scale: 0 10 20 30 40 50 60



PG	Protein	LLR	Notes
A	ZNF329	20.0	
A	ZKSCAN7	20.0	
B	**ARHGAP11B**	**19.6**	
A	PRDM14	19.5	
A	FEZF2	19.4	
A	ZNF579	19.3	
A	GLIS2	19.2	1
A	ZNF175	18.8	2
A	ZNF562	18.8	
A	ZNF829	18.8	
A	ZNF696	18.8	
A	ZNF845	18.8	
A	ZNF846	18.8	
A	ZNF25	18.8	
A	ZNF41	18.8	
A	ZNF415	18.8	3
A	ZNF623	18.8	
A	ZNF624	18.8	
A	ZNF189	18.8	
A	ZNF880	18.8	
A	ZNF347	18.8	
A	ZNF419	18.8	
A	ZKSCAN8	18.8	
A	ZNF287	18.8	
A	ZNF160	18.8	
A	ZNF121	18.8	
A	ZNF71	18.8	
A	ZNF665	18.8	
A	ZFP90	18.8	
A	ZNF556	18.8	
A	ZNF584	18.8	
A	ZNF558	18.8	
A	ZNF225	18.8	
A	ZNF141	18.8	
A	ZNF367	18.8	

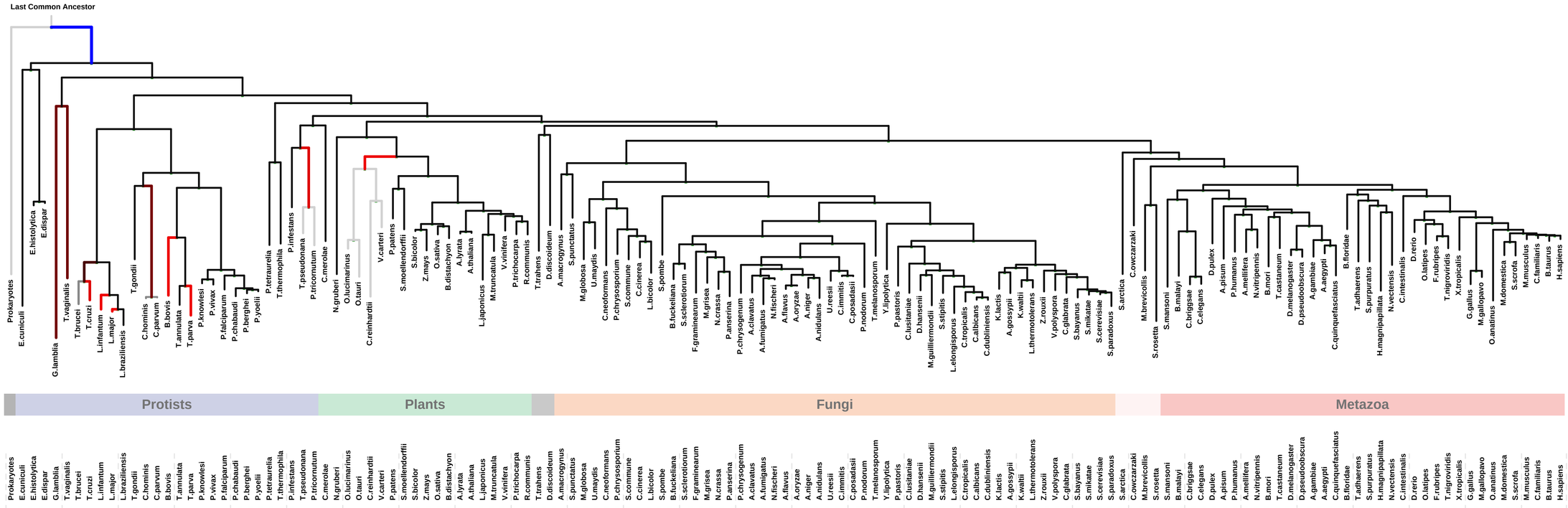
1: nuclear speck || 2: intermediate filament cytoskeleton || 3: microtubule cytoskeleton

ECM 2, Gene set "NuRD complex", Page 10

Num of ECM Genes: 2. Num of Predicted Genes: 500. ECM Strength: 2.3

PRESENCE — GAIN — ABSENCE — LOSS

Log-likelihood Ratio Scale: 0 10 20 30 40 50 60



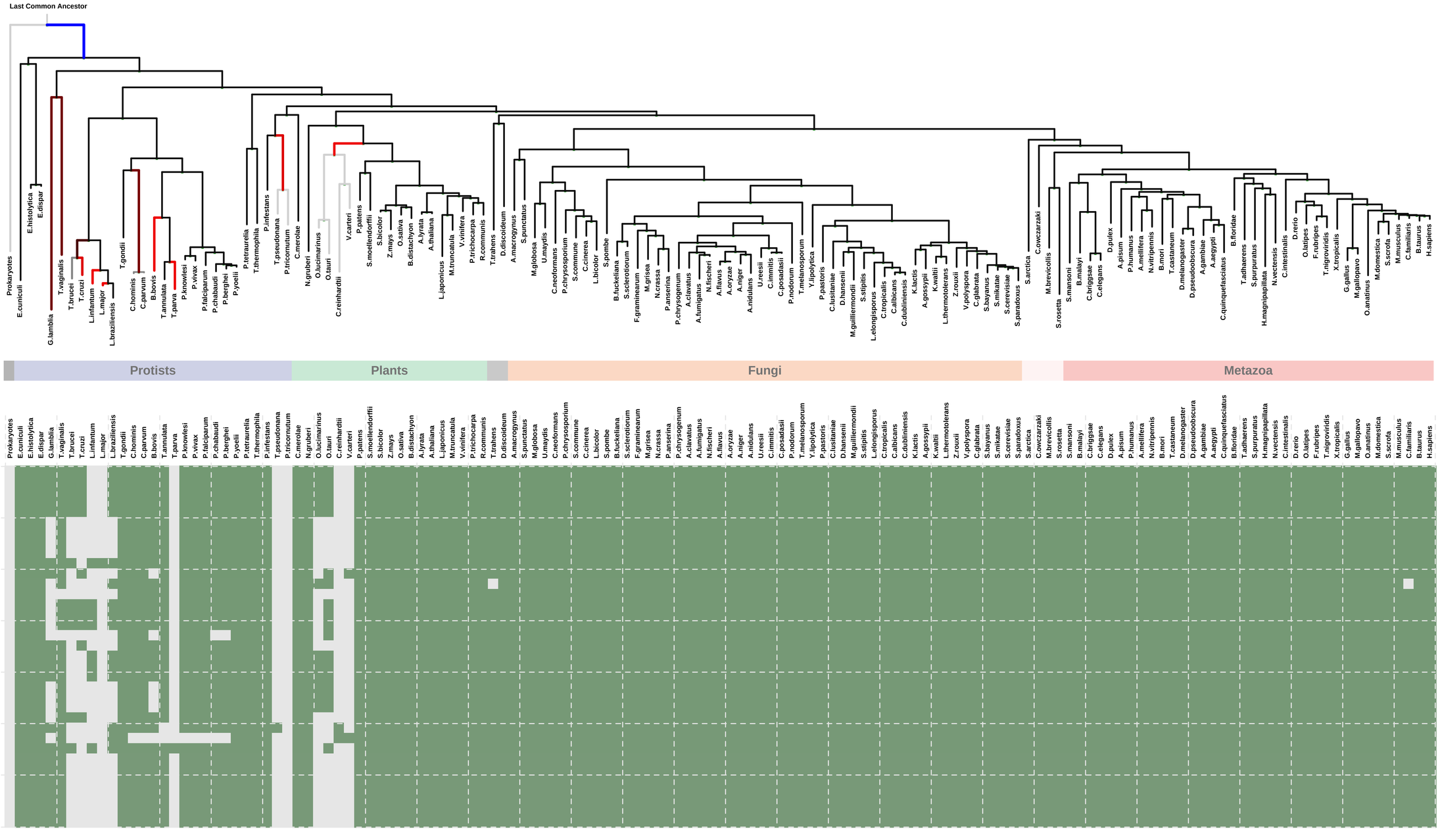
PG	Protein	LLR	Notes
A	LOC100129144	18.7	
A	ZNF607	18.5	
A	ZBTB48	18.5	
A	ZNF746	18.5	
A	ZNF286B	18.5	
A	ZNF436	18.5	
A	ZNF723	18.5	
A	ZIK1	18.5	
A	ZNF337	18.5	
A	ZNF45	18.5	
A	ZNF286A	18.5	
A	ZNF625	18.5	
A	ZNF34	18.1	
A	ZNF84	17.8	
	ZNF84	**17.8**	
A	ZBTB49	17.6	
A	KLF7	17.5	
A	ZNF410	17.4	
A	ZNF684	17.3	
A	SNAI1	17.0	
A	ZNF408	16.8	
A	PRDM4	16.7	
A	ZNF354C	16.5	
A	ZFP69B	16.4	
A	ZNF234	16.4	
A	ZNF710	16.4	
A	ZNF383	16.4	
A	ZKSCAN3	16.4	
A	PRDM5	16.4	
A	ZNF19	16.4	
A	ZNF778	16.4	
A	ZNF836	16.4	
A	ZNF557	16.4	
	ZNF568	**16.4**	
A	ZNF480	16.4	

ECM 2, Gene set "NuRD complex", Page 11

Num of ECM Genes: 2. Num of Predicted Genes: 500. ECM Strength: 2.3

PRESENCE — GAIN — ABSENCE — LOSS

Log-likelihood Ratio Scale: 0 10 20 30 40 50 60



PG	Protein	LLR	Notes
A	ZNF672	16.4	
A	ZNF268	16.4	
A	ZNF57	16.4	
A	ZNF570	16.4	
A	ZNF596	16.4	
A	ZNF142	15.9	
A	ZNF781	15.9	
A	MAZ	15.9	
A	KLF17	15.9	
A	ZNF837	15.7	
A	ZFP69	15.7	
A	ZXDC	15.5	
A	EGR4	15.4	
	PRDM16	**15.4**	
A	PRDM16	15.4	1
	PRDM16	**15.4**	
A	KLF3	15.3	
A	ZNF611	15.2	
A	ZNF317	15.0	
A	ZNF713	15.0	
A	ZNF275	15.0	
A	KLF16	14.9	
A	ZIC2	14.9	
A	ZNF692	14.9	
A	PRDM15	14.8	
A	ZBTB34	14.7	
A	ZBTB5	14.5	
A	ZNF384	14.5	2
A	ZNF730	14.3	
A	ZNF621	14.3	
A	ZFP41	14.3	
A	ZNF355P	14.3	
A	ZNF75A	14.3	
A	ZNF117	14.3	
A	OSR1	14.3	

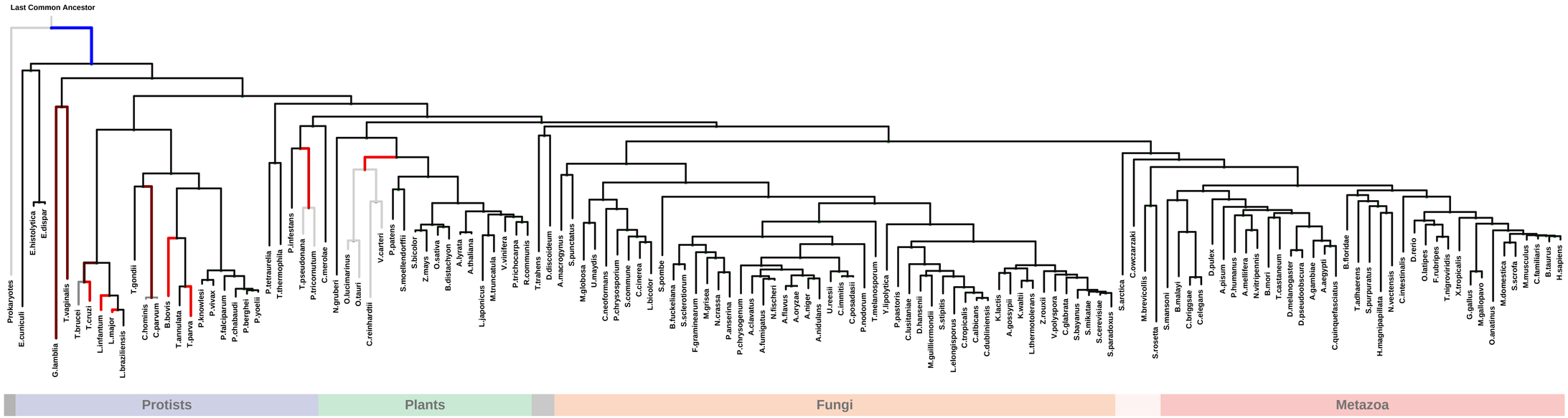
1: transcriptional repressor complex || 2: focal adhesion

ECM 2, Gene set "NuRD complex", Page 12

Num of ECM Genes: 2. Num of Predicted Genes: 500. ECM Strength: 2.3

PRESENCE — GAIN — ABSENCE — LOSS

Log-likelihood Ratio Scale: 0 10 20 30 40 50 60



PG	Protein	LLR	Notes
A	ZBTB7C	14.3	
A	ZNF699	14.2	
A	ZNF136	14.2	
A	VEZF1	14.2	
A	ZNF20	13.8	
A	ZBTB46	13.7	
A	ZFP57	13.6	1
A	ZNF354A	13.6	
A	FEZF1	13.6	
A	ZNF615	13.5	
A	ZFP92	13.4	
A	ZNF398	13.4	
A	ZNF442	13.4	
A	SCRT1	13.4	
A	ZNF563	13.4	
A	100287841	13.4	
A	100290283	13.4	
A	ZNF763	13.4	
A	OSR2	13.2	
A	PRDM10	13.1	
A	ZIC1	13.1	
A	HIVEP2	12.9	
A	ZNF597	12.7	
A	KLF15	12.7	
A	ZNF649	12.7	
A	ZNF140	12.7	
A	SP6	12.7	
A	HIC1	12.7	2
A	ZNF682	12.7	
A	ZNF302	12.7	
A	ZSCAN9	12.7	
A	ZNF689	12.7	
A	ZNF727	12.7	
A	ZNF432	12.7	
A	ZNF195	12.7	

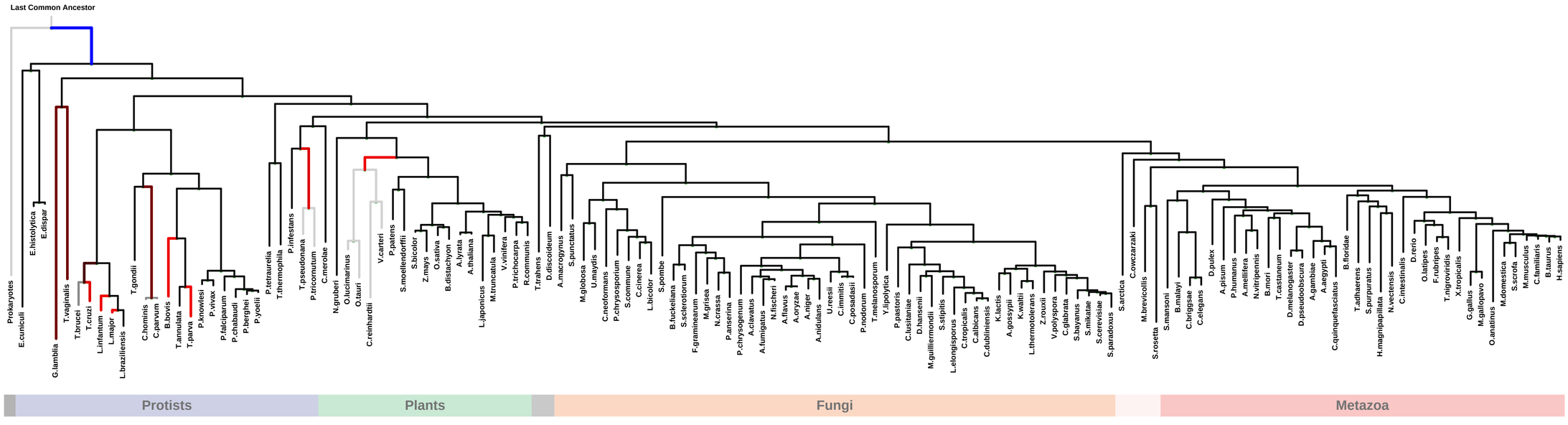
1: nuclear heterochromatin || 2: chromatin

ECM 2, Gene set "NuRD complex", Page 13

Num of ECM Genes: 2. Num of Predicted Genes: 500. ECM Strength: 2.3

PRESENCE — GAIN — ABSENCE — LOSS

Log-likelihood Ratio Scale: 0 10 20 30 40 50 60



PG	Protein	LLR	Notes
A	ZNF736	12.7	
A	GZF1	12.7	
A	GTF3A	12.6	
A	ZSCAN5A	12.5	
A	ZNF438	12.5	
A	ZNF219	12.5	
A	ZBTB8A	12.3	
A	ZNF426	12.3	
A	ZNF441	12.3	
A	KLF5	12.2	
A	WT1	12.2	1
A	KLF11	12.2	
A	ZNF594	12.0	
A	ZNF627	12.0	
A	ZNF534	12.0	
A	ZNF860	12.0	
A	ZNF155	12.0	
A	ZNF485	12.0	
A	ZNF391	12.0	
A	ZNF322	12.0	
A	ZNF12	12.0	
A	ZNF530	12.0	
A	BCL11B	11.8	
A	ZNF728	11.6	
B	PRR5-ARHGAP8	11.5	
A	LOC646629	11.5	
A	ZNF844	11.5	
A	GFI1B	11.5	2
A	ZIC3	11.3	
A	ZNF681	11.2	
A	ZNF430	11.2	
A	ZNF813	11.1	
A	ZNF737	11.1	
A	ZNF304	11.1	
A	ZNF107	11.1	

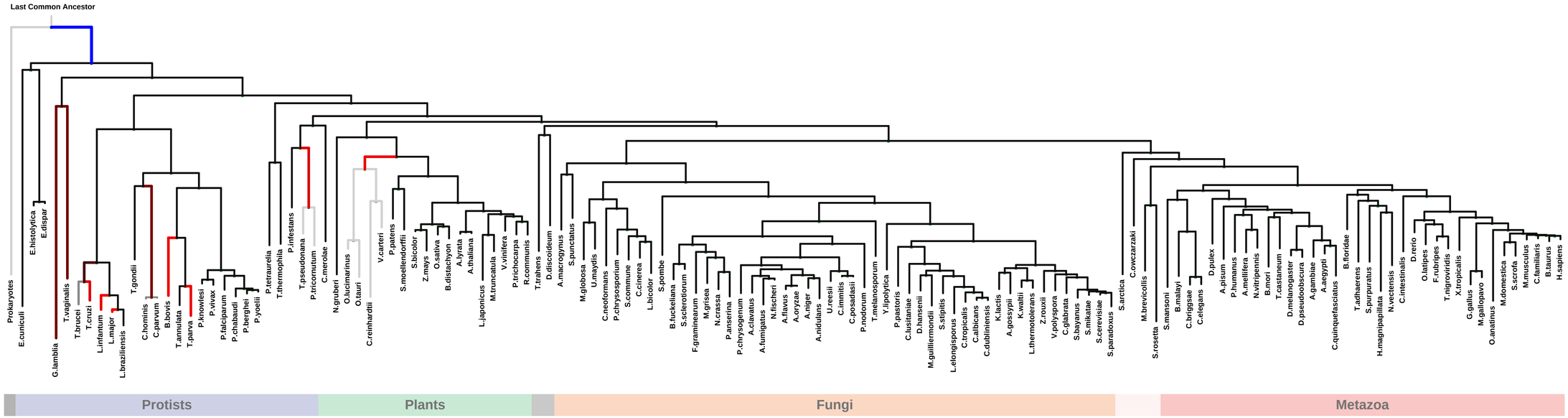
1: nuclear speck || 2: nuclear matrix

ECM 2, Gene set "NuRD complex", Page 14

Num of ECM Genes: 2. Num of Predicted Genes: 500. ECM Strength: 2.3

PRESENCE — GAIN — ABSENCE — LOSS

Log-likelihood Ratio Scale: 0 10 20 30 40 50 60



PG	Protein	LLR	Notes
A	ZNF620	11.1	
A	ZNF233	11.1	
A	ZNF571	11.1	
A	ZNF841	11.1	
A	RBAK	11.1	
A	ZNF761	11.1	
A	ZNF439	11.1	
A	ZNF626	11.1	
A	ZNF547	11.1	
A	ZNF549	11.1	
A	ZNF32	11.1	
A	ZNF492	11.1	
A	ZNF493	11.1	
A	ZNF257	11.1	
A	ZSCAN25	11.1	
A	ZNF322P1	11.1	
A	SNAI3	11.1	
A	ZNF98	11.1	
A	ZNF285	11.1	
A	ZNF660	11.1	
A	ZNF595	11.1	
A	ZNF664	11.1	
A	ZNF417	11.1	
A	ZNF334	11.1	
A	ZFP30	11.1	
A	ZNF517	11.1	
A	ZNF192P1	11.1	
A	ZNF721	11.1	
A	ZNF221	11.1	
A	ZNF300	11.1	
A	ZNF17	11.1	
A	ZNF678	11.1	
A	ZNF735	11.1	
A	ZNF613	11.1	
A	ZNF496	11.1	1

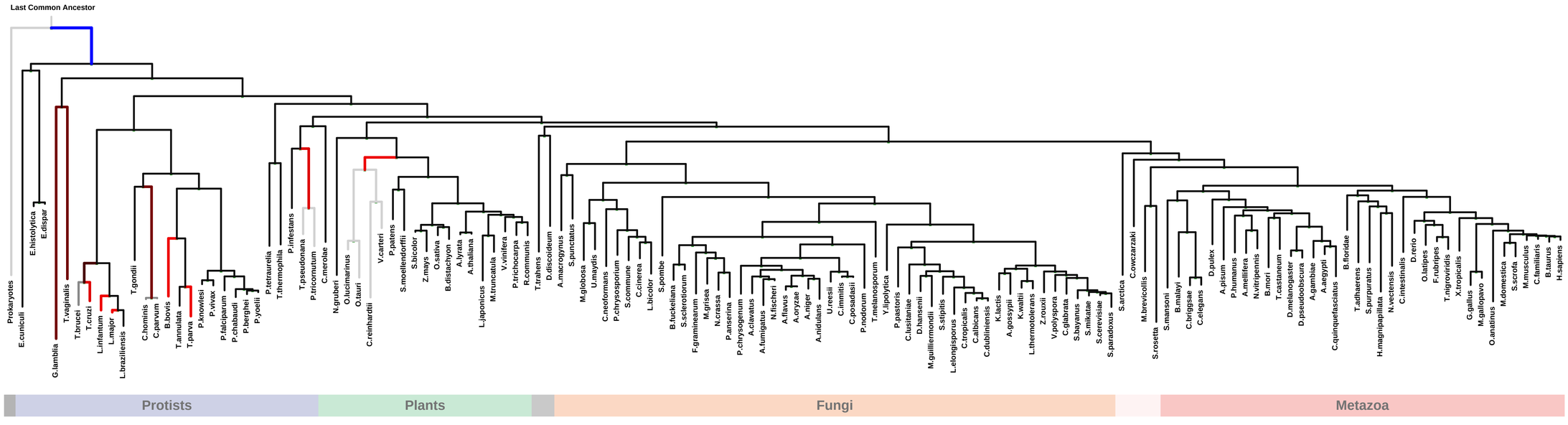
1: nuclear body

ECM 2, Gene set "NuRD complex", Page 15

Num of ECM Genes: 2. Num of Predicted Genes: 500. ECM Strength: 2.3

PRESENCE — GAIN — ABSENCE — LOSS

Log-likelihood Ratio Scale: 0 10 20 30 40 50 60



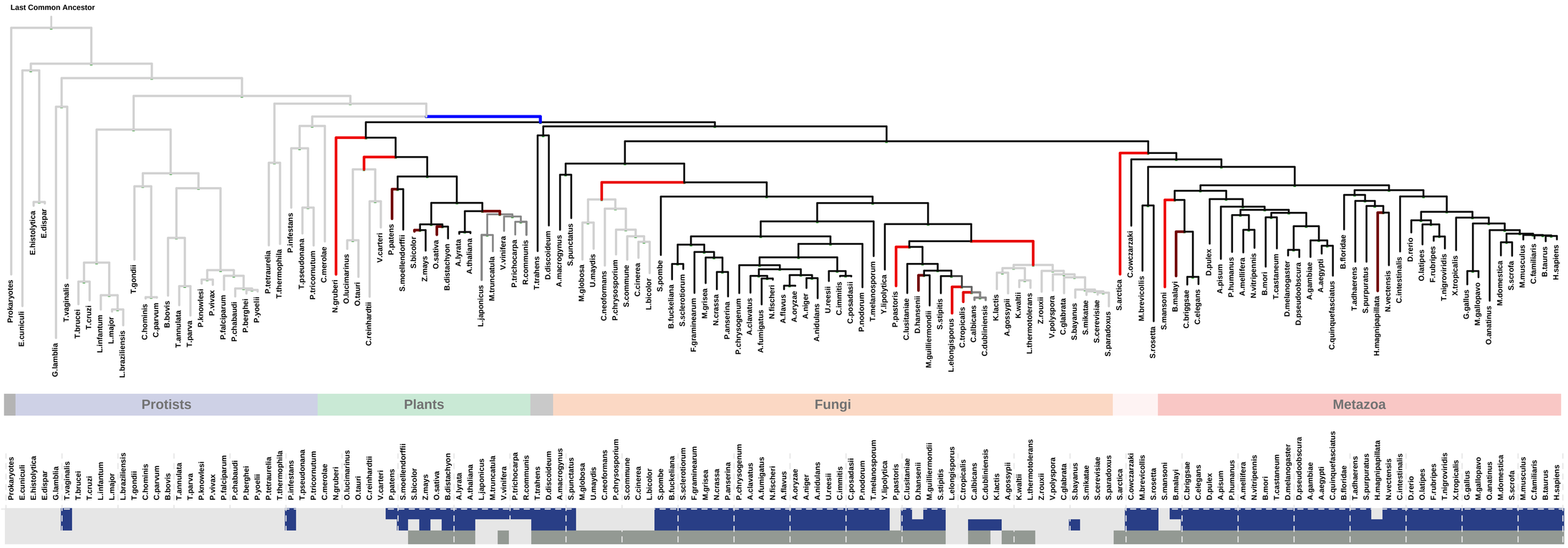
PG	Protein	LLR	Notes
A	ZNF223	11.0	
A	ZNF577	10.8	
A	ZNF546	10.8	
A	ZNF780B	10.8	
A	ZNF561	10.8	
A	ZNF775	10.4	
C	**LMX1A**	**10.0**	
C	LHX4	10.0	
A	ZNF614	10.0	
A	ZKSCAN4	10.0	
A	ZNF133	10.0	
A	ZNF490	10.0	

ECM 3, Gene set "NuRD complex", Page 1

Num of ECM Genes: 2. Num of Predicted Genes: 1. ECM Strength: 1.7

PRESENCE — GAIN — ABSENCE — LOSS

Log-likelihood Ratio Scale: 0 10 20 30 40 50 60



PG	Protein	LLR	Notes
A	APPL1		1 / 2 / 3 / 4
A	APPL2		1 / 2 / 3
	FCHO1	2.7	5 / 6

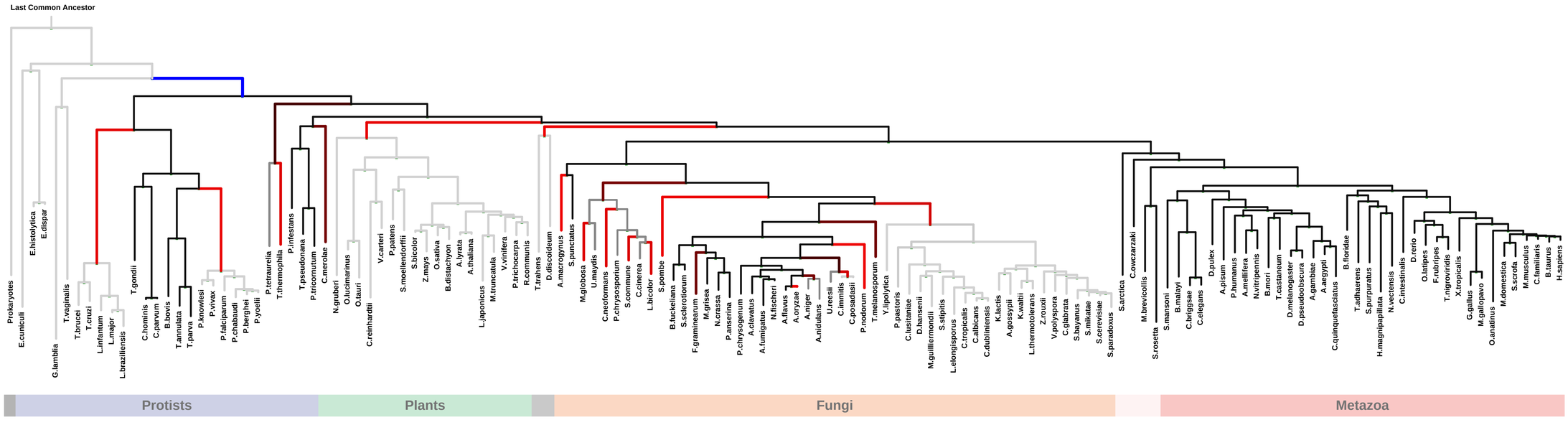
1: early endosome membrane || 2: endosome membrane || 3: NuRD complex || 4: vesicle membrane || 5: clathrin-coated vesicle || 6: coated pit

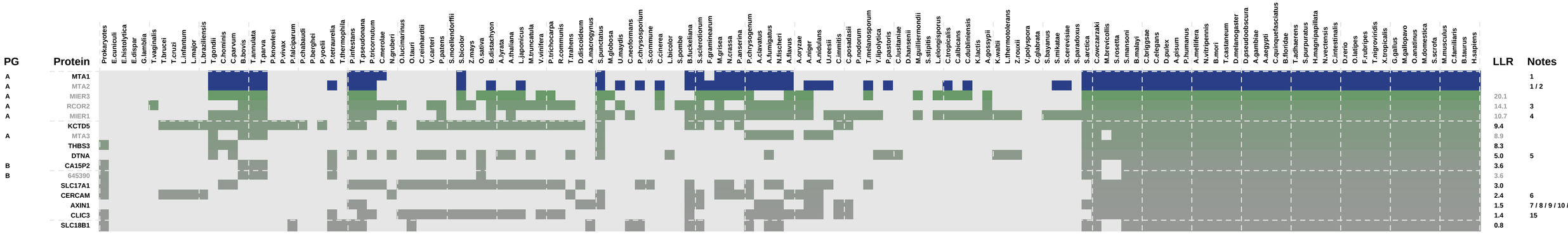
ECM 4, Gene set "NuRD complex", Page 1

Num of ECM Genes: 2. Num of Predicted Genes: 14. ECM Strength: 4.6

PRESENCE — GAIN — ABSENCE — LOSS

Log-likelihood Ratio Scale: 0 10 20 30 40 50 60





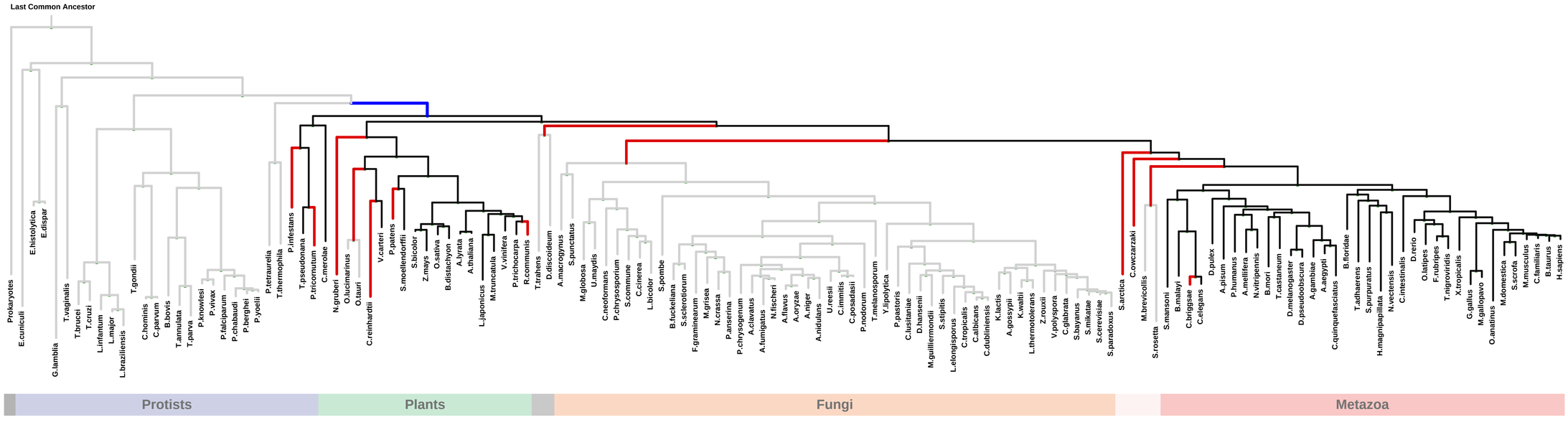
1: NuRD complex || 2: histone deacetylase complex || 3: chromatin || 4: transcriptional repressor complex || 5: synapse || 6: endoplasmic reticulum lumen || 7: beta-catenin destruction complex || 8: cell cortex || 9: cell periphery || 10: cytoplasmic membrane-bounded vesicle || 11: cytoplasmic microtubule || 12: cytoplasmic vesicle || 13: lateral plasma membrane || 14: postsynaptic density || 15: chloride channel complex

ECM 5, Gene set "NuRD complex", Page 1

Num of ECM Genes: 1. Num of Predicted Genes: 30

PRESENCE — GAIN — ABSENCE — LOSS

Log-likelihood Ratio Scale: 0 10 20 30 40 50 60



PG	Protein	LLR	Notes
A	MBD3		1 / 2
A	MBD2	40.6	1 / 3
B	PURG	20.6	
	NTAN1	20.0	
	MLF1	19.4	
B	PURB	14.8	4
B	PURA	14.8	4 / 5 / 6
	ZNF862	9.4	
C	MMP7	9.2	7
C	MMP23B	9.2	7
C	MMP26	9.2	7
	MRPS27	8.7	8
	ARNT	7.3	
	PRKRA	6.6	
	FBXO31	5.1	9
	TMEM259	4.8	
	CLEC17A	3.7	
	SLC10A3	3.7	
	MRPL1	3.4	10
D	DNMT3B	1.9	11 / 12
	EBF4	1.9	
C	MMP1	1.6	7
C	MMP16	1.6	7 / 13
C	MMP12	1.6	7
C	MMP27	1.6	7
C	MMP25	1.6	7 / 14
	SIAH3	1.5	
D	DNMT3A	1.3	11 / 12 / 15 / 16
C	MMP14	0.5	13 / 17 / 18
	YLPM1	0.4	19
C	MMP15	0.2	17

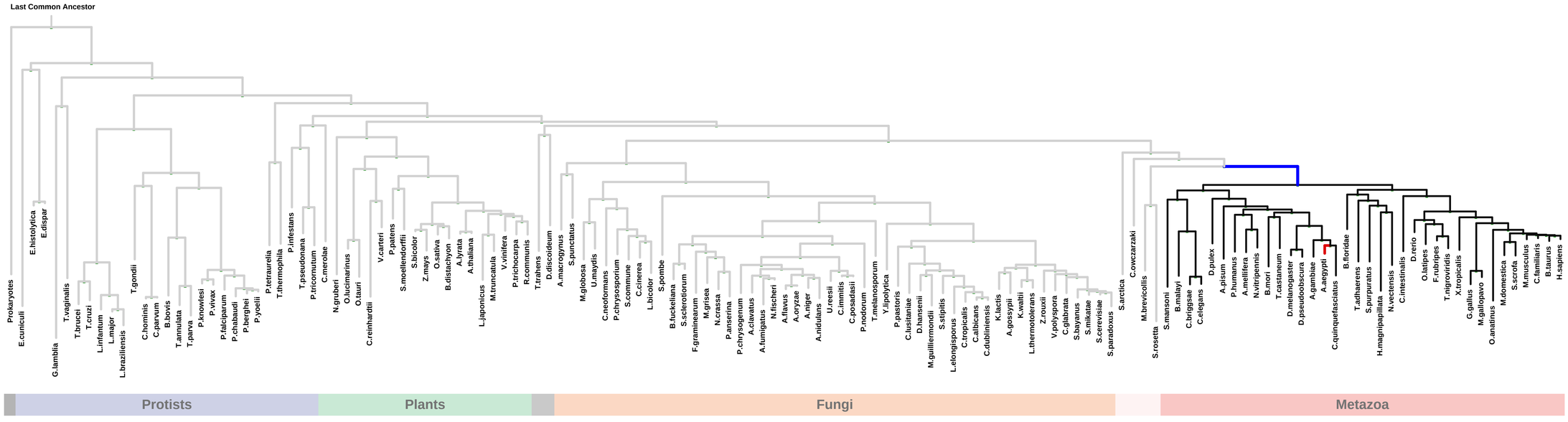
1: heterochromatin || 2: NuRD complex || 3: histone deacetylase complex || 4: DNA replication factor A complex || 5: dendrite || 6: nuclear chromosome, telomeric region || 7: proteinaceous extracellular matrix || 8: ribosome || 9: SCF ubiquitin ligase complex || 10: large ribosomal subunit || 11: chromosome, centromeric region || 12: nuclear heterochromatin || 13: Golgi lumen || 14: anchored to membrane || 15: euchromatin || 16: nuclear matrix || 17: extracellular matrix || 18: melanosome || 19: nuclear speck

ECM 6, Gene set "NuRD complex", Page 1

Num of ECM Genes: 1. Num of Predicted Genes: 5

PRESENCE — GAIN — ABSENCE — LOSS

Log-likelihood Ratio Scale: 0 10 20 30 40 50 60



PG	Protein	LLR	Notes
	GATAD2A		1 / 2
A	ATF1	7.4	
	COL4A5	7.4	3 / 4 / 5 / 6
A	CREB1	7.4	7
B	100510232	0.3	
B	100510323	0.3	

1: nuclear speck || 2: NuRD complex || 3: basal lamina || 4: collagen type IV || 5: endoplasmic reticulum lumen || 6: neuromuscular junction || 7: nuclear euchromatin