

1 Supplementary Tables

2 A. Intrinsic and synaptic properties of GC models for the pruning and the growth experiments

	Pruning Experiment				Growth Experiment			
GC models	R _{in} (MΩ)	Sag ratio	EPSP (mV)	IPSP (mV)	R _{in} (MΩ)	Sag ratio	EPSP (mV)	IPSP (mV)
12-dendrites	369	0.91	0.62	-1.37	0.91	0.62	-1.37	0.91
6-dendrites	387	0.84	0.80	-1.37	414	0.74	1.10	-1.37
3-dendrites	410	0.73	1.12	-1.42	439	0.53	2.10	-1.46

3 B. Intrinsic and synaptic properties of GC models when all models have the same R_{in}

Pruning Experiment – Match R _{in} =369MΩ						
	g _{leak}			Soma size		
GC models	Sag ratio	EPSP (mV)	IPSP (mV)	Sag ratio	EPSP (mV)	IPSP (mV)
12-dendrites	0.91	0.62	-1.37	0.91	0.62	-1.37
6-dendrites	0.84	0.77	-1.37	0.85	0.75	-1.36
3-dendrites	0.74	1.01	-1.41	0.76	0.90	-1.40
Growth Experiment – Match R _{in} =369MΩ						
	g _{leak}			Soma size		
GC models	Sag ratio	EPSP (mV)	IPSP (mV)	Sag ratio	EPSP (mV)	IPSP (mV)
12-dendrites	0.91	0.62	-1.37	0.91	0.62	-1.37
6-dendrites	0.75	1.01	-1.36	0.77	0.93	-1.35
3-dendrites	0.58	1.72	-1.44	0.64	1.34	-1.36

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5 C. Intrinsic and synaptic properties of GC models with matched sparsity

	Match sparsity distributions (~5-8%)							
	g_{leak}				Soma size			
GC models	R_{in} (M Ω)	Sag ratio	EPSP (mV)	IPSP (mV)	R_{in} (M Ω)	Sag ratio	EPSP (mV)	IPSP (mV)
12-dendrites	369	0.91	0.62	-1.37	369	0.91	0.62	-1.37
6-dendrites	345	0.83	0.73	-1.36	353	0.85	0.70	-1.35
3-dendrites	328	0.74	1.00	-1.39	347	0.76	0.90	-1.37

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