

Core Domains Example: Simulation Output (plotted in Figure 7)

Figure 7 (reproduced in Figure S3-1) contained five traces. In order to obtain these traces, simulate the model found in 'ACoreDomainsExample.cellml' for 100 seconds.

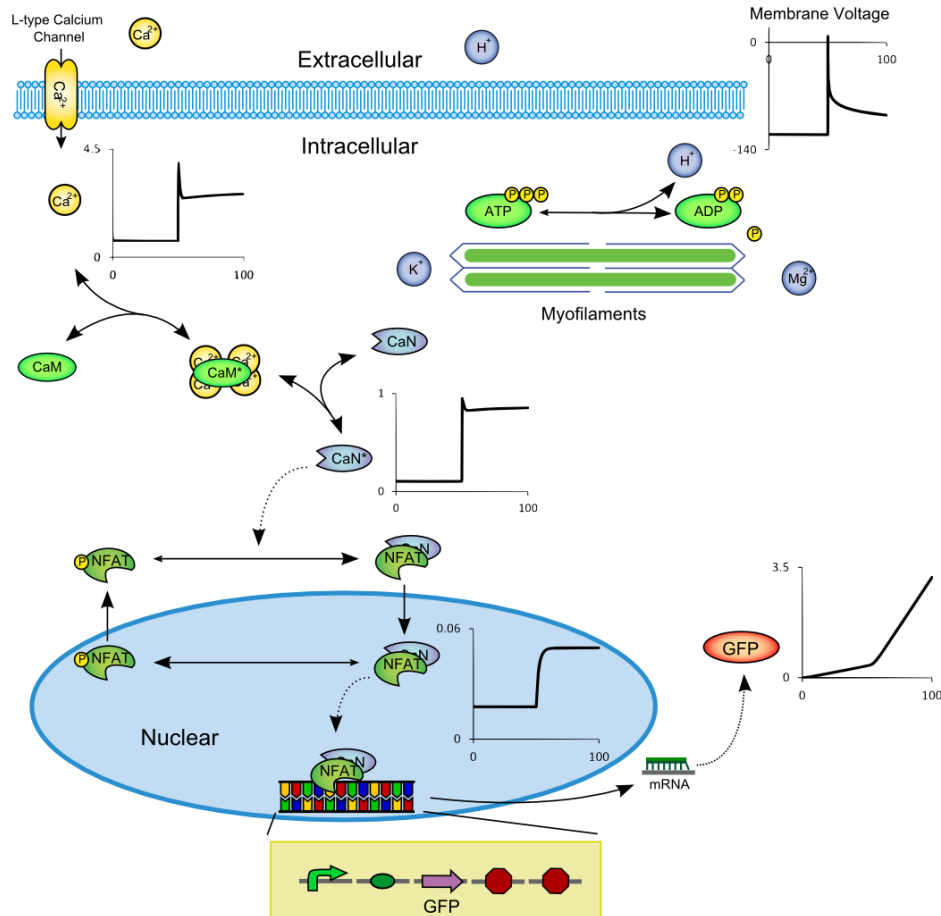


Figure S3-1: Core Domains Example Schema and Output (Reproduced from Figure 7)

The meaning and units of the y-axis for each trace (in order from top to bottom and left to right) is given in Table S2-1 below. The name of the CellML variable used in the plot is also given.

Meaning	Units	CellML variable
Membrane Voltage	Milli-Volt	ICaL_to_Cai:membraneV:V
Concentration of free intracellular calcium	Micro-molar	ICaL_to_Cai:Ca:concentration
Proportion of activated calcineurin	Dimensionless	CaN_to_DNAReady_NFAT: Calcineurin_Activation:act_N
Concentration of GFP	Nano-molar	ExampleDevice:GFP:concentration
Concentration of DNA-ready NFAT	Micro-molar	CaN_to_DNAReady_NFAT: NFAT_Cycling:NFATN_n:concentration

Table S2-1 Trace Information for Figure S3-1.

NB: In OpenCOR, at the time of writing, it is very important to set the 'Point interval' and 'Maximum step' settings to ≤ 0.1 s, otherwise it may miss the stimulation current which has a very short duration. These settings are shown in the Figure S3-2.

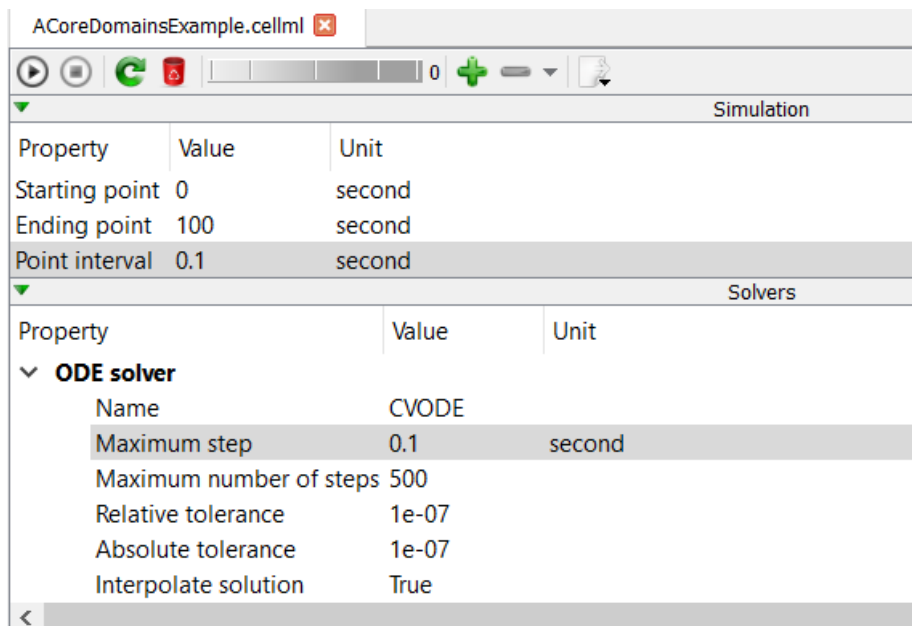


Figure S3-2: Core Domains Example solver settings