Parameter	Description	Value Range	Value Used	Reference(s)
Ca ²⁺ binding to Cal	M			
k_{on}^{1N}	1 st Ca ²⁺ binding to CaM N-terminus	25.0-260.0 µM ⁻¹ s ⁻¹	100.0 µM ⁻¹ s ⁻¹	[1]
k_{off}^{1N}	1st Ca ²⁺ dissociation from CaM N-terminus	1000.0-4000.0 s ⁻¹	2500.0 s ⁻¹	[1]
K_D^{1N}	Equilibrium binding of 1st Ca2+ to CaM N-	15.0-40.0 μM	25.0 µM	[1]
	terminus			
k_{on}^{2N}	2 nd Ca ²⁺ binding to CaM N-terminus	50.0-300.0 µM ⁻¹ s ⁻¹	150.0 µM ⁻¹ s ⁻¹	[1]
k_{off}^{2N}	2 nd Ca ²⁺ dissociation from CaM N-terminus	500.0-1000.0+ s ⁻¹	750.0 s ⁻¹	[1]
K_D^{2N}	Equilibrium binding of 2 nd Ca ²⁺ to CaM N-	3.3-9.0 µM	5.0 µM	[1]
	terminus			
k_{on}^{1C}	1 st Ca ²⁺ binding to CaM C-terminus	$1.2-9.6 \ \mu M^{-1}s^{-1}$	$4.0 \ \mu M^{-1} s^{-1}$	[1]
k_{off}^{1C}	1 st Ca ²⁺ dissociation from CaM C-terminus	10.0-70.0 s ⁻¹	40.0 s ⁻¹	[1]
K_D^{1C}	Equilibrium binding of 1st Ca2+ to CaM C-	7.3-12.0 μM	10.0 µ M	[1]
	terminus			
k_{on}^{2C}	2 nd Ca ²⁺ binding to CaM C-terminus	5.0-25.0 µM ⁻¹ s ⁻¹	$10.0 \ \mu M^{-1} s^{-1}$	[1]
k_{off}^{2C}	2 nd Ca ²⁺ dissociation from CaM C-terminus	8.5-10.0 s ⁻¹	9.25 s ⁻¹	[1]
K_D^{2C}	Equilibrium binding of 2 nd Ca ²⁺ to CaM C-	0.4-1.7 μM	0.925 μM	[1]
	terminus			
CaM binding to AC				•
$k_{on}^{AC1CaM0}$	CaM0 binding to AC1		0.00166 µM ⁻¹ s ⁻¹	[2]
$k_{off}^{AC1CaM0}$	CaM0 dissociation from AC1		0.9 s ⁻¹	[3]
$K_D^{AC1CaM0}$	Equilibrium binding of CaM0 to AC1		542.0 μM	[4]
$k_{on}^{AC1CaM1N}$	CaM1N binding to AC1		0.00166 µM ⁻¹ s ⁻¹	[2]
$k_{off}^{AC1CaM1N}$	CaM1N dissociation from AC1		0.9 s ⁻¹	[3]
$K_D^{AC1CaM1N}$	Equilibrium binding of CaM1N to AC1		542.0 μM	[4]
$k_{on}^{AC1CaM1C}$	CaM1C binding to AC1		0.00830 µM ⁻¹ s ⁻¹	[2]
$k_{off}^{AC1CaM1C}$	CaM1C dissociation from AC1		0.9 s ⁻¹	[3]
K _D ^{AC1CaM1C}	Equilibrium binding of CaM1C to AC1		108.0 µM	[4]
k ^{AC1CaM1N1C}	CaM1N1C binding to AC1		0.00830 µM ⁻¹ s ⁻¹	[2]
$k_{off}^{AC1CaM1N1C}$	CaM1N1C dissociation from AC1		0.9 s ⁻¹	[3]
$K_D^{AC1CaM1N1C}$	Equilibrium binding of CaM1N1C to AC1		108.0 µM	[4]
k ^{AC1CaM2N}	CaM2N binding to AC1		0.156 µM ⁻¹ s ⁻¹	[2]
k ^{AC1CaM2N}	CaM2N dissociation from AC1		0.9 s ⁻¹	[3]
K ^{AC1CaM2N}	Equilibrium binding of CaM2N to AC1		5.78 uM	[4]
kAC1CaM2C	CaM2C binding to AC1		0.064 µM ⁻¹ s ⁻¹	[2]
L, AC1CaM2C	CaM2C dissociation from AC1		$0.9 {\rm s}^{-1}$	[3]
Koff VAC1CaM2C	Equilibrium hinding of CaM2C to AC1		14.1 µM	[3]
hAC1CaM2N1C	CaM2N1C binding to AC1		$0.778 \mu M^{-1} - 1$	[2]
κ_{on}	CoMONIC dissociation from ACI		$0.7/8 \mu \text{IVI}^{-1}\text{S}^{-1}$	[2]
$K_{off}^{norcam2N1C}$	Cawizinic dissociation from ACI		0.9 8 *	
K _D	Equilibrium binding of CaM2N1C to ACI		1.16 µM	[4]
$k_{on}^{ACICAMIN2C}$	CaM1N2C binding to AC1		0.064 µM ⁻¹ s ⁻¹	[2]

$k_{off}^{AC1CaM1N2C}$	CaM1N2C dissociation from AC1	0.9 s ⁻¹	[3]
$K_D^{AC1CaM1N2C}$	Equilibrium binding of CaM1N2C to AC1	14.1 μM	[4]
$k_{on}^{AC1CaM4}$	CaM4 binding to AC1	6.0 μM ⁻¹ s ⁻¹	[5]
$k_{off}^{AC1CaM4}$	CaM4 dissociation from AC1	0.9 s ⁻¹	[5]
K _D ^{AC1CaM4}	Equilibrium binding of CaM4 to AC1	0.15 μM	[2]
Ca ²⁺ binding to AC	I-CaM		I
k_{on}^{AC11N}	1st Ca2+ binding to AC1-CaM N-terminus	100.0 µM ⁻¹ s ⁻¹	[6]
k_{off}^{AC11N}	1st Ca2+ dissociation from AC1-CaM N-	2500.0 s ⁻¹	[8]
<i>.</i> ,,,	terminus		
K_D^{AC11N}	Equilibrium binding of 1st Ca2+ to AC1-CaM	25.0 µM	[2]
	N-terminus		
k_{on}^{AC12N}	2 nd Ca ²⁺ binding to AC1-CaM N-terminus	150.0 μM ⁻¹ s ⁻¹	[6]
k_{off}^{AC12N}	2nd Ca ²⁺ dissociation from AC1-CaM N-	8.0 s ⁻¹	[8]
	terminus		
K_D^{AC12N}	Equilibrium binding of 2 nd Ca ²⁺ to AC1-CaM	0.0533 μM	[2]
	N-terminus		
k_{on}^{AC11C}	1 st Ca ²⁺ binding to AC1-CaM C-terminus	$4.0 \ \mu M^{-1} s^{-1}$	[6]
k_{off}^{AC11C}	1 st Ca ²⁺ dissociation from AC1-CaM C-	8.0 s ⁻¹	[8]
4.014.0	terminus		
K_D^{AC11C}	Equilibrium binding of 1 st Ca ²⁺ to AC1-CaM C-	2.0 μM	[2]
1 46126			
k _{on} ^{AC12C}	2 nd Ca ²⁺ binding to ACI-CaM C-terminus	$10.0 \ \mu M^{-1} s^{-1}$	[6]
k_{off}^{AC12C}	2 nd Ca ²⁺ dissociation from AC1-CaM C-	1.2 s ⁻¹	[8]
AC12C	terminus $\Gamma_{\rm res}$ (1) is the binding of $\Omega_{\rm r}^{2+}$ to $\Lambda_{\rm res}$ (1) $\Gamma_{\rm res}$ (1)		[0]
K _D	Equilibrium binding of 2 nd Ca ²⁺ to ACI-CaM	0.12 μM	[2]
CaM binding to AC	8 N terminus		
1. AC8ntCaM0	CaMO binding to AC8 N terminus	0.00020	[2]
$K_{0n}^{antCaM0}$	CaMO discassistion from A C9 N terminus	$0.00828 \mu M^{-1}S^{-1}$	[2]
$k_{off}^{ACONCOMO}$		1.0 \$	[3]
KD	Equilibrium binding of CaMO to AC8 N-	121.0 µM	[4]
1-AC8ntCaM1N	CoM1N binding to AC8 N terminus	0.00020	[2]
K_{On}^{hoo}	CaMIN diagonistics from AC8 N terminus	$0.00828 \mu M^{-1} s^{-1}$	[2]
$k_{off}^{ncontcaM1N}$	Camin dissociation from AC8 N-terminus	1.0 \$	[3]
KD	terminus	121.0 µM	[4]
I-AC8ntCaM1C	CoM1C binding to AC8 N terminus	0.0676.00611	[2]
K_{on}	CaM1C disconiation from AC8 N terminus	$0.06/6 \mu M^{-1} S^{-1}$	[2]
$K_{off}^{AC8ntCaM1C}$	Carvin dissociation from AC8 N-terminus	1.0 S	[3]
KD	Equilibrium binding of CaMTC to AC8 N-	14.8 μM	[4]
$L_AC8ntCaM1N1C$	CoMINIC binding to ACS N terminus	0.0000000000000000000000000000000000000	[0]
K_{on}		$0.0676 \mu M^{-1}s^{-1}$	[2]
Koff	Caminic dissociation from AC8 N-terminus	1.0 s ⁻¹	[3]
$K_D^{ACSNTCAMINIC}$	Equilibrium binding of CaM1N1C to AC8 N-	14.8 μM	[4]
	terminus		

$k_{on}^{AC8ntCaM2N}$	CaM2N binding to AC8 N-terminus	0.00828 µM ⁻¹ s ⁻¹	[2]
$k_{off}^{AC8ntCaM2N}$	CaM2N dissociation from AC8 N-terminus	1.0 s ⁻¹	[3]
$K_D^{AC8ntCaM2N}$	Equilibrium binding of CaM2N to AC8 N-	121.0 µM	[4]
2	terminus		
$k_{on}^{AC8ntCaM2C}$	CaM2C binding to AC8 N-terminus	1.25 μM ⁻¹ s ⁻¹	[2]
$k_{off}^{AC8ntCaM2C}$	CaM2C dissociation from AC8 N-terminus	1.0 s ⁻¹	[3]
K ^{AC8ntCaM2C}	Equilibrium binding of CaM2C to AC8 N-	0.8 µM	[4]
	terminus		
$k_{on}^{AC8ntCaM2N1C}$	CaM2N1C binding to AC8 N-terminus	0.0676 μM ⁻¹ s ⁻¹	[2]
$k_{off}^{AC8ntCaM2N1C}$	CaM2N1C dissociation from AC8 N-terminus	1.0 s ⁻¹	[3]
$K_D^{AC8ntCaM2N1C}$	Equilibrium binding of CaM2N1C to AC8 N-	14.8 µM	[4]
_	terminus		
$k_{on}^{AC8ntCaM1N2C}$	CaM1N2C binding to AC8 N-terminus	1.25 μM ⁻¹ s ⁻¹	[2]
$k_{off}^{AC8ntCaM1N2C}$	CaM1N2C dissociation from AC8 N-terminus	1.0 s ⁻¹	[3]
$K_D^{AC8ntCaM1N2C}$	Equilibrium binding of CaM1N2C to AC8 N-	0.8 µM	[4]
2	terminus		
$k_{on}^{AC8ntCaM4}$	CaM4 binding to AC8 N-terminus	1.25 μM ⁻¹ s ⁻¹	[5]
$k_{off}^{AC8ntCaM4}$	CaM4 dissociation from AC8 N-terminus	1.0 s ⁻¹	[5]
$K_D^{AC8ntCaM4}$	Equilibrium binding of CaM4 to AC8 N-	0.8 µM	[2]
D	terminus		
Ca ²⁺ binding to AC	8(N-terminus)-CaM	I	I
$k_{on}^{AC8nt1N}$	1st Ca2+ binding to AC8(N-terminus)-CaM N-	100.0 µM ⁻¹ s ⁻¹	[6]
	terminus		
$k_{off}^{AC8nt1N}$	1 st Ca ²⁺ dissociation from AC8(N-terminus)-	2500.0 s ⁻¹	[7]
- , ,	CaM N-terminus		
$K_D^{AC8nt1N}$	Equilibrium binding of 1st Ca2+ to AC8(N-	25.0 µM	[2]
	terminus)-CaM N-terminus		
$k_{on}^{AC8nt2N}$	2 nd Ca ²⁺ binding to AC8(N-terminus)-CaM N-	150.0 μM ⁻¹ s ⁻¹	[6]
	terminus		
$k_{off}^{AC8nt2N}$	2 nd Ca ²⁺ dissociation from AC8(N-terminus)-	750.0 s ⁻¹	[8]
4.00 40 N	CaM N-terminus		
$K_D^{ACBNT2N}$	Equilibrium binding of 2^{nd} Ca ²⁺ to AC8(N-	5.0 µM	[2]
1 AC9mt1C	terminus)-CaM N-terminus		F(1)
k ^{Acon}	Ist Ca ²⁺ binding to AC8(N-terminus)-CaM C-	$4.0 \ \mu M^{-1} s^{-1}$	[6]
1 4C8nt1C	terminus 1st Ce^{2+} disconsistion from A C8(NI terminus)	4.01	гот
k _{off}	CoM C torminus	4.9 \$	[8]
tz AC8nt1C	Carvi C-terminus Equilibrium binding of $1st Co^{2+} to A COOL$	1.02.004	[2]
KD	terminus) CaM C terminus	1.23 μM	[2]
1-AC8nt2C	$2nd Co^{2+}$ binding to $\Delta C^{2}(N)$ terminuo) CoMC	10.0 u) 611	[6]
Kon	2 Ca Uniting to ACO(IN-terminus)-Calvi C-	10.0 μ M ⁻¹ S ⁻¹	[0]
J, AC8nt2C	2^{nd} Ca ²⁺ dissociation from AC8(N-terminus)	0.5 s ⁻¹	[8]
Koff	CaM C-terminus	0.0 0	[0]
1			1

$K_D^{AC8nt2C}$	Equilibrium binding of 2nd Ca2+ to AC8(N-	0.05 µM	[2]
	terminus)-CaM C-terminus		
CaM binding to AC	8 C-terminus		
$k_{on}^{AC8ctCaM0}$	CaM0 binding to AC8 C-terminus	0.00267 µM ⁻¹ s ⁻¹	[2]
$k_{off}^{AC8ctCaM0}$	CaM0 dissociation from AC8 C-terminus	1.0 s ⁻¹	[3]
K _D ÁC8ctCaM0	Equilibrium binding of CaM0 to AC8 C-	375.0 μM	[4]
	terminus		
$k_{on}^{AC8ctCaM1N}$	CaM1N binding to AC8 C-terminus	0.00267 µM ⁻¹ s ⁻¹	[2]
$k_{off}^{AC8ctCaM1N}$	CaM1N dissociation from AC8 C-terminus	1.0 s ⁻¹	[3]
K _D ^{AC8ctCaM1N}	Equilibrium binding of CaM1N to AC8 C-	375.0 μM	[4]
	terminus		
$k_{on}^{AC8ctCaM1C}$	CaM1C binding to AC8 C-terminus	0.00267 µM ⁻¹ s ⁻¹	[2]
$k_{off}^{AC8ctCaM1C}$	CaM1C dissociation from AC8 C-terminus	1.0 s ⁻¹	[3]
$K_D^{AC8ctCaM1C}$	Equilibrium binding of CaM1C to AC8 C-	375.0 μM	[4]
2	terminus		
$k_{on}^{AC8ctCaM1N1C}$	CaM1N1C binding to AC8 C-terminus	0.00267 µM ⁻¹ s ⁻¹	[2]
$k_{off}^{AC8ctCaM1N1C}$	CaM1N1C dissociation from AC8 C-terminus	1.0 s ⁻¹	[3]
$K_D^{AC8ctCaM1N1C}$	Equilibrium binding of CaM1N1C to AC8 C-	375.0 μM	[4]
2	terminus		
$k_{on}^{AC8ctCaM2N}$	CaM2N binding to AC8 C-terminus	1.25 µM ⁻¹ s ⁻¹	[2]
$k_{off}^{AC8ctCaM2N}$	CaM2N dissociation from AC8 C-terminus	1.0 s ⁻¹	[3]
$K_D^{AC8ctCaM2N}$	Equilibrium binding of CaM2N to AC8 C-	0.8 µM	[4]
	terminus		
k ^{AC8ctCaM2C}	CaM2C binding to AC8 C-terminus	0.00267 µM ⁻¹ s ⁻¹	[2]
$k_{off}^{AC8ctCaM2C}$	CaM2C dissociation from AC8 C-terminus	1.0 s ⁻¹	[3]
$K_D^{AC8ctCaM2C}$	Equilibrium binding of CaM2C to AC8 C-	375.0 μM	[4]
_	terminus		
$k_{on}^{AC8ctCaM2N1C}$	CaM2N1C binding to AC8 C-terminus	1.25 μM ⁻¹ s ⁻¹	[2]
$k_{off}^{AC8ctCaM2N1C}$	CaM2N1C dissociation from AC8 C-terminus	1.0 s ⁻¹	[3]
$K_D^{AC8ctCaM2N1C}$	Equilibrium binding of CaM2N1C to AC8 C-	0.8 µM	[4]
	terminus		
$k_{on}^{AC8ctCaM1N2C}$	CaM1N2C binding to AC8 C-terminus	0.00267 µM ⁻¹ s ⁻¹	[2]
$k_{off}^{AC8ctCaM1N2C}$	CaM1N2C dissociation from AC8 C-terminus	1.0 s ⁻¹	[3]
$K_D^{AC8ctCaM1N2C}$	Equilibrium binding of CaM1N2C to AC8 C-	375.0 µM	[4]
_	terminus		
$k_{on}^{AC8ctCaM4}$	CaM4 binding to AC8 C-terminus	1.25 μM ⁻¹ s ⁻¹	[5]
$k_{off}^{AC8ctCaM4}$	CaM4 dissociation from AC8 C-terminus	1.0 s ⁻¹	[5]
$K_D^{AC8ctCaM4}$	Equilibrium binding of CaM4 to AC8 C-	0.8 µM	[2]
	terminus		
Ca ²⁺ binding to AC8	8(C-terminus)-CaM		
$k_{on}^{AC8ct1N}$	1st Ca ²⁺ binding to AC8(C-terminus)-CaM N-	100.0 µM ⁻¹ s ⁻¹	[6]
	terminus		

, AC9ct1N		0.500.0.1	C - 1
k _{off}	Is Ca ²⁺ dissociation from AC8(C-terminus)-	2500.0 s ⁻¹	[7]
TT AC9 ct 1 N			[2]
$K_D^{ACOULIN}$	Equilibrium binding of 1st Ca ²⁺ to AC8(C-	25.0 μM	[2]
1 AC9ct2N			F (1)
Kon	2 ^{nu} Ca ²⁺ binding to AC8(C-terminus)-CaM N-	150.0 μM ⁻¹ s ⁻¹	[6]
AC9ct2N		1 (1	503
k _{off}	2 nd Ca ²⁺ dissociation from AC8(C-terminus)- CaM N-terminus	1.6 S ⁻¹	[8]
₩ AC8ct2N	Equilibrium binding of $2^{nd} C a^{2+}$ to $\Delta C (C - C)^{2+}$	0.0107.01	[2]
κ _D	terminus)-CaM N-terminus	0.0107 µ M	[2]
k-AC8ct1C	1 st Ca ²⁺ binding to AC8(C-terminus)-CaM C-	4 0 UM ⁻¹ s ⁻¹	[6]
Non	terminus	τ.υ μινι 3	[~]
k ^{AC8ct1C}	1 st Ca ²⁺ dissociation from AC8(C-terminus)-	40.0 s ⁻¹	[8]
Roff	CaM C-terminus		[-]
K ^{AC8ct1C}	Equilibrium binding of 1 st Ca ²⁺ to AC8(C-	10.0 uM	[2]
тр	terminus)-CaM C-terminus		
k ^{AC8ct2C}	2 nd Ca ²⁺ binding to AC8(C-terminus)-CaM C-	10.0 µM ⁻¹ s ⁻¹	[6]
n on	terminus		
k ^{AC8ct2C}	2 nd Ca ²⁺ dissociation from AC8(C-terminus)-	9.25 s ⁻¹	[8]
	CaM C-terminus		
$K_D^{AC8ct2C}$	Equilibrium binding of 2 nd Ca ²⁺ to AC8(C-	0.925 µM	[2]
D	terminus)-CaM C-terminus		
CaM binding to Cal	N		
k ^{PPCaM0}	CaM0 binding to CaN	0.0000000798 µM ⁻¹ s ⁻¹	[2]
k ^{PPCaM0}	CaM0 dissociation from CaN	0.000319 s ⁻¹	[3]
K_D^{PPCaM0}	Equilibrium binding of CaM0 to CaN	3999.0 µM	[4]
$k_{on}^{PPCaM1N}$	CaM1N binding to CaN	0.00000665 µM ⁻¹ s ⁻¹	[2]
$k_{off}^{PPCaM1N}$	CaM1N dissociation from CaN	0.000319 s ⁻¹	[3]
$K_D^{PPCaM1N}$	Equilibrium binding of CaM1N to CaN	48.0 µM	[4]
$k_{on}^{PPCaM1C}$	CaM1C binding to CaN	0.00001334 µM ⁻¹ s ⁻¹	[2]
$k_{off}^{PPCaM1C}$	CaM1C dissociation from CaN	0.000319 s ⁻¹	[3]
$K_D^{PPCaM1C}$	Equilibrium binding of CaM1C to CaN	23.9 µM	[4]
$k_{on}^{PPCaM1N1C}$	CaM1N1C binding to CaN	0.000665 μM ⁻¹ s ⁻¹	[2]
$k_{off}^{PPCaM1N1C}$	CaM1N1C dissociation from CaN	0.000319 s ⁻¹	[3]
$K_D^{PPCaM1N1C}$	Equilibrium binding of CaM1N1C to CaN	0.480 µM	[4]
$k_{on}^{PPCaM2N}$			[2]
1.PPCaM2N	CaM2N binding to CaN	0.000416 µM ⁻¹ s ⁻¹	[2]
<i>K_{off}</i>	CaM2N binding to CaN CaM2N dissociation from CaN	 0.000416 µM ⁻¹ s ⁻¹ 0.000319 s ⁻¹	[2]
K_{off} $K_D^{PPCaM2N}$	CaM2N binding to CaN CaM2N dissociation from CaN Equilibrium binding of CaM2N to CaN	0.000416 µM ⁻¹ s ⁻¹ 0.000319 s ⁻¹ 0.768 µM	[2] [3] [4]
$\frac{\kappa_{off}}{K_D^{PPCaM2N}}$ $\frac{k_{on}^{PPCaM2C}}{k_{on}^{PPCaM2C}}$	CaM2N binding to CaN CaM2N dissociation from CaN Equilibrium binding of CaM2N to CaN CaM2C binding to CaN	0.000416 µM ⁻¹ s ⁻¹ 0.000319 s ⁻¹ 0.768 µM 0.000123 µM ⁻¹ s ⁻¹	[2] [3] [4] [2]
$\frac{\kappa_{off}}{K_D^{PPCaM2N}}$ $\frac{k_{on}^{PPCaM2C}}{k_{off}^{PPCaM2C}}$	CaM2N binding to CaN CaM2N dissociation from CaN Equilibrium binding of CaM2N to CaN CaM2C binding to CaN CaM2C dissociation from CaN	0.000416 µM ⁻¹ s ⁻¹ 0.000319 s ⁻¹ 0.768 µM 0.000123 µM ⁻¹ s ⁻¹ 0.000319 s ⁻¹	[2] [3] [4] [2] [3]
$\frac{\kappa_{off}}{K_D^{PPCaM2N}}$ $\frac{k_{on}^{PPCaM2C}}{k_{off}^{PPCaM2C}}$ $\frac{K_D^{PPCaM2C}}{K_D^{PPCaM2C}}$	CaM2N binding to CaN CaM2N dissociation from CaN Equilibrium binding of CaM2N to CaN CaM2C binding to CaN CaM2C dissociation from CaN Equilibrium binding of CaM2C to CaN	0.000416 μM ⁻¹ s ⁻¹ 0.000319 s ⁻¹ 0.768 μM 0.000123 μM ⁻¹ s ⁻¹ 0.000319 s ⁻¹ 2.59 μM	[2] [3] [4] [2] [3] [4]
$\frac{k_{off}}{K_D^{PPCaM2N}}$ $\frac{k_{on}^{PPCaM2C}}{k_{off}^{PPCaM2C}}$ $\frac{K_D^{PPCaM2C}}{K_D^{PPCaM2C}}$ $\frac{k_{on}^{PPCaM2N1C}}{k_{on}^{PPCaM2N1C}}$	CaM2N binding to CaN CaM2N dissociation from CaN Equilibrium binding of CaM2N to CaN CaM2C binding to CaN CaM2C dissociation from CaN Equilibrium binding of CaM2C to CaN CaM2N1C binding to CaN	0.000416 μM ⁻¹ s ⁻¹ 0.000319 s ⁻¹ 0.768 μM 0.000123 μM ⁻¹ s ⁻¹ 0.000319 s ⁻¹ 2.59 μM 0.0416 μM ⁻¹ s ⁻¹	[2] [3] [4] [2] [3] [4] [2]

$K_D^{PPCaM2N1C}$	Equilibrium binding of CaM2N1C to CaN		0.00768 µM	[4]
$k_{on}^{PPCaM1N2C}$	CaM1N2C binding to CaN		0.0102 µM ⁻¹ s ⁻¹	[2]
$k_{off}^{PPCaM1N2C}$	CaM1N2C dissociation from CaN		0.000319 s ⁻¹	[3]
$K_D^{PPCaM1N2C}$	Equilibrium binding of CaM1N2C to CaN		0.0311 µM	[4]
k ^{PPCaM4}	CaM4 binding to CaN	0.0089-46.0 µM ⁻¹ s ⁻¹	0.64 µM ⁻¹ s ⁻¹	[9-11]
k_{off}^{PPCaM4}	CaM4 dissociation from CaN	0.000085-0.0039 s ⁻¹	0.000319 s ⁻¹	[9-11]
K_D^{PPCaM4}	Equilibrium binding of CaM4 to CaN	0.000028-0.024 µM	0.000498 µM	[9-11]
Ca ²⁺ binding to CaN	N-CaM			
k_{on}^{PP1N}	1st Ca2+ binding to CaN-CaM N-terminus		100.0 µM ⁻¹ s ⁻¹	[6]
k_{off}^{PP1N}	1st Ca2+ dissociation from CaN-CaM N-		30.0 s ⁻¹	[2]
-))	terminus			
K_D^{PP1N}	Equilibrium binding of 1st Ca2+ to CaN-CaM N-		0.3 μM	[12]
	terminus			
k_{on}^{PP2N}	2 nd Ca ²⁺ binding to CaN-CaM N-terminus		150.0 µM ⁻¹ s ⁻¹	[6]
k_{off}^{PP2N}	2 nd Ca ²⁺ dissociation from CaN-CaM N-		12.0 s ⁻¹	[2]
DDON	terminus			
K_D^{PP2N}	Equilibrium binding of 2 nd Ca ²⁺ to CaN-CaM		0.08 µM	[12]
I DD1C	N-terminus			[[[]]
$\frac{K_{on}^{IIIC}}{R_{on}^{IIIC}}$	1ª Ca ²⁺ binding to CaN-CaW C-terminus		$4.0 \mu\text{M}^{-1}\text{s}^{-1}$	[6]
k_{off}^{PP1C}	Ist Ca ²⁺ dissociation from CaN-CaM C-		$0.4 \mathrm{s}^{-1}$	[2]
vPP1C	Equilibrium binding of 1st Ca ²⁺ to CaN CaM C		0.1.0.1	[12]
$K_D^{}$	terminus		$0.1 \mu\text{M}$	
k ^{PP2C}	$2^{nd} Ca^{2+}$ binding to CaN-CaM C-terminus		10.0 µM ⁻¹ s ⁻¹	[6]
LPP2C	$2^{nd} Ca^{2+}$ dissociation from CaN-CaM C-		$0.6 {\rm s}^{-1}$	[2]
κ _{off}	terminus		0.0 5	[~]
K _P P2C	Equilibrium binding of 2 nd Ca ²⁺ to CaN-CaM		0.06 µM	[12]
D	C-terminus			
CaM binding to Cal	MKII			
k_{on}^{KCaM0}	CaM0 binding to CaMKII		0.0038 µM ⁻¹ s ⁻¹	[1]
k_{off}^{KCaM0}	CaM0 dissociation from CaMKII		5.5 s ⁻¹	[1]
K_D^{KCaM0}	Equilibrium binding of CaM0 to CaMKII		1.45 mM	[2]
k ^{KCaM1N}	CaM1N binding to CaMKII		0.022 µM ⁻¹ s ⁻¹	[1]
k ^{KCaM1N}	CaM1N dissociation from CaMKII		3.1 s ⁻¹	[1]
K_D^{KCaM1N}	Equilibrium binding of CaM1N to CaMKII		141.0 µM	[2]
k ^{KCaM1C}	CaM1C binding to CaMKII		0.059 µM ⁻¹ s ⁻¹	[1]
k ^{KCaM1C}	CaM1C dissociation from CaMKII		6.1 s ⁻¹	[1]
K _K CaM1C	Equilibrium binding of CaM1C to CaMKII		103.0 µM	[2]
k ^{KCaM1N1C}	CaM1N1C binding to CaMKII		0.33 µM ⁻¹ s ⁻¹	[1]
kKCaM1N1C	CaM1N1C dissociation from CaMKII		3.4 s ⁻¹	[1]
K _{CaM1N1C}	Equilibrium binding of CaM1N1C to CaMKII		10.3 µM	[2]
k ^{KCaM2N}	CaM2N binding to CaMKII		0.12 µM ⁻¹ s ⁻¹	[1]
011	-		P V	

k_{off}^{KCaM2N}	CaM2N dissociation from CaMKII		1.7 s ⁻¹	[1]
K _D ^{KCaM2N}	Equilibrium binding of CaM2N to CaMKII	16.5-23.5 μM	14.2 μM	[1]
k_{on}^{KCaM2C}	CaM2C binding to CaMKII		0.92 µM ⁻¹ s ⁻¹	[1]
k_{off}^{KCaM2C}	CaM2C dissociation from CaMKII		6.8 s ⁻¹	[1]
K ^{KCaM2C}	Equilibrium binding of CaM2C to CaMKII	1.6-8.4 µM	7.39 μM	[1]
$k_{on}^{KCaM2N1C}$	CaM2N1C binding to CaMKII		1.9 μM ⁻¹ s ⁻¹	[1]
$k_{off}^{KCaM2N1C}$	CaM2N1C dissociation from CaMKII		1.9 s ⁻¹	[1]
K ^{KC} aM2N1C	Equilibrium binding of CaM2N1C to CaMKII		1.0 µM	[2]
$k_{on}^{KCaM1N2C}$	CaM1N2C binding to CaMKII		5.2 μM ⁻¹ s ⁻¹	[1]
$k_{off}^{KCaM1N2C}$	CaM1N2C dissociation from CaMKII		3.8 s ⁻¹	[1]
K ^{ŔĆaM1N2C}	Equilibrium binding of CaM1N2C to CaMKII		0.731 μM	[2]
k_{on}^{KCaM4}	CaM4 binding to CaMKII	14.0-60.0 µM ⁻¹ s ⁻¹	30.0 µM ⁻¹ s ⁻¹	[1]
k_{off}^{KCaM4}	CaM4 dissociation from CaMKII	1.1-2.3 s ⁻¹	1.7 s ⁻¹	[1]
K_D^{KCaM4}	Equilibrium binding of CaM4 to CaMKII	0.04-0.08 µM	0.0567 µM	[1]
Ca ²⁺ binding to CaN	/KII-CaM			
k_{on}^{K1N}	1 st Ca ²⁺ binding to CaMKII-CaM N-terminus		76.0 μM ⁻¹ s ⁻¹	[1]
k_{off}^{K1N}	1 st Ca ²⁺ dissociation from CaMKII-CaM N-		300.0 s ⁻¹	[1]
	terminus			
K_D^{K1N}	Equilibrium binding of 1 st Ca ²⁺ to CaMKII-		3.95 µM	[2]
, <i>K</i> 2N	CaM N-terminus			[1]
k _{on} ^{K2N}	2 nd Ca ²⁺ binding to CaMKII-CaM N-terminus		76.0 µM ⁻¹ s ⁻¹	
k ^{KZN}	2 nd Ca ²⁺ dissociation from CaMKII-CaM N- terminus	6.0-60.0 s ⁻¹	29.6 s ⁻¹	
K_D^{K2N}	Equilibrium binding of 2 nd Ca ²⁺ to CaMKII-		0.39 μM	[2]
	CaM N-terminus		_	
k_{on}^{K1C}	1 st Ca ²⁺ binding to CaMKII-CaM C-terminus		44.0 μM ⁻¹ s ⁻¹	[1]
k_{off}^{K1C}	1 st Ca ²⁺ dissociation from CaMKII-CaM C-		33.0 s ⁻¹	[1]
10				501
K_D^{K1C}	Equilibrium binding of $1^{st} Ca^{2+}$ to CaMKII-		0.75 μM	[2]
1-K2C	$2^{nd}C^{2^+}$ binding to C2MKII C2M C terminus		44.0 u) (r] m]	[1]
κ_{on}	2 Ca binding to Calvixin-Calvi C-terminus	0.40.4.0 c ⁻¹	$44.0 \mu\text{M}^{-1}\text{S}^{-1}$	
<i>R</i> _{off}	terminus	0.49-4.9 \$	2.78	[1]
K _D ^{K2C}	Equilibrium binding of 2 nd Ca ²⁺ to CaMKII-		0.0614 µM	[2]
D	CaM C-terminus		· ·	
CaM binding to ML	CK			
k_{on}^{MKCaM0}	CaM0 binding to MLCK		0.00717 µM ⁻¹ s ⁻¹	[2]
k_{off}^{MKCaM0}	CaM0 dissociation from MLCK		0.132 s ⁻¹	[3]
K_D^{MKCaM0}	Equilibrium binding of CaM0 to MLCK		18.4 μM	[4]
$k_{on}^{MKCaM1N}$	CaM1N binding to MLCK		0.00717 µM ⁻¹ s ⁻¹	[2]
$k_{off}^{MKCaM1N}$	CaM1N dissociation from MLCK		0.132 s ⁻¹	[3]
$K_D^{MKCaM1N}$	Equilibrium binding of CaM1N to MLCK		18.4 µM	[4]

$k_{on}^{MKCaM1C}$	CaM1C binding to MLCK		0.00717 µM ⁻¹ s ⁻¹	[2]
k ^{MKCaM1C}	CaM1C dissociation from MLCK		0.132 s ⁻¹	[3]
K _D ^{MKCaM1C}	Equilibrium binding of CaM1C to MLCK		18.4 µM	[4]
$k_{on}^{MKCaM1N1C}$	CaM1N1C binding to MLCK		0.00717 μM ⁻¹ s ⁻¹	[2]
$k_{off}^{MKCaM1N1C}$	CaM1N1C dissociation from MLCK		0.132 s ⁻¹	[3]
$K_D^{MKCaM1N1C}$	Equilibrium binding of CaM1N1C to MLCK		18.4 µM	[4]
$k_{on}^{MKCaM2N}$	CaM2N binding to MLCK		2.34 μM ⁻¹ s ⁻¹	[2]
$k_{off}^{MKCaM2N}$	CaM2N dissociation from MLCK		0.132 s ⁻¹	[3]
K _D ^{MKCaM2N}	Equilibrium binding of CaM2N to MLCK		0.0564 µM	[4]
$k_{on}^{MKCaM2C}$	CaM2C binding to MLCK		0.170 μM ⁻¹ s ⁻¹	[2]
$k_{off}^{MKCaM2C}$	CaM2C dissociation from MLCK		0.132 s ⁻¹	[3]
$K_D^{MKCaM2C}$	Equilibrium binding of CaM2C to MLCK		0.776 μM	[4]
$k_{on}^{MKCaM2N1C}$	CaM2N1C binding to MLCK		2.34 µM ⁻¹ s ⁻¹	[2]
$k_{off}^{MKCaM2N1C}$	CaM2N1C dissociation from MLCK		0.132 s ⁻¹	[3]
$K_D^{MKCaM2N1C}$	Equilibrium binding of CaM2N1C to MLCK		0.0564 μM	[4]
$k_{on}^{MKCaM1N2C}$	CaM1N2C binding to MLCK		0.170 µM ⁻¹ s ⁻¹	[2]
$k_{off}^{MKCaM1N2C}$	CaM1N2C dissociation from MLCK		0.132 s ⁻¹	[3]
$K_D^{MKCaM1N2C}$	Equilibrium binding of CaM1N2C to MLCK		0.776 μM	[4]
k_{on}^{MKCaM4}	CaM4 binding to MLCK	28.0-110.0 µM ⁻¹ s ⁻¹	55.5 μM ⁻¹ s ⁻¹	[13-15]
k ^{MKCaM4}	CaM4 dissociation from MLCK	0.031-0.56 s ⁻¹	0.132 s ⁻¹	[13-15]
K_D^{MKCaM4}	Equilibrium binding of CaM4 to MLCK	0.0011-0.22 μM	0.00238 µM	[13-15]
Ca ²⁺ binding to ML	CK-CaM			
k_{on}^{MK1N}	1 st Ca ²⁺ binding to MLCK-CaM N-terminus		100.0 µM ⁻¹ s ⁻¹	[6]
k_{off}^{MK1N}	1 st Ca ²⁺ dissociation from MLCK-CaM N-		2500.0 s ⁻¹	[7]
MIZAN	terminus			
K_D^{MK1N}	Equilibrium binding of 1 st Ca ²⁺ to MLCK-CaM		25.0 μM	[2]
1-MK2N	N-terminus $2^{\text{pd}}Ca^{2+}$ binding to MLCK CoM N terminus		150.0	[6]
K_{on}^{m}	2 nd Ca ²⁺ dissociation from MLCK CoM N	2 2 12 5 c ⁻¹	$150.0 \mu\text{M}^{-1}\text{s}^{-1}$	[0]
Koff	terminus	2.3-12.3 5	2.3 8	[13-18]
K ^{MK2N}	Equilibrium binding of 2^{nd} Ca ²⁺ to MLCK-CaM		0.015 µM	[2]
тр	N-terminus			
k_{on}^{MK1C}	1 st Ca ²⁺ binding to MLCK-CaM C-terminus		4.0 μM ⁻¹ s ⁻¹	[6]
k_{off}^{MK1C}	1st Ca2+ dissociation from MLCK-CaM C-		40.0 s ⁻¹	[7]
0))	terminus			
K_D^{MK1C}	Equilibrium binding of 1st Ca2+ to MLCK-CaM		10.0 µM	[2]
	C-terminus			
k _{on} ^{MK2C}	2 nd Ca ²⁺ binding to MLCK-CaM C-terminus		$10.0 \ \mu M^{-1} s^{-1}$	[6]
k_{off}^{MK2C}	2 nd Ca ²⁺ dissociation from MLCK-CaM C-	0.39-0.7 s ⁻¹	0.39 s ⁻¹	[15-18]
TT MK2C	terminus			[2]
K_D^{mn20}	Equilibrium binding of 2 nd Ca ²⁺ to MLCK-CaM		0.039 μΜ	[4]
	C-terminus			

CaM binding to Ng			
k_{on}^{NgCaM0}	CaM0 binding to Ng	28.0 µM ⁻¹ s ⁻¹	[19]
k_{off}^{NgCaM0}	CaM0 dissociation from Ng	36.0 s ⁻¹	[19]
K_D^{NgCaM0}	Equilibrium binding of CaM0 to Ng	1.29 μM	[19]
$k_{on}^{NgCaM1N}$	CaM1N binding to Ng	28.0 µM ⁻¹ s ⁻¹	[19]
k ^{NgCaM1N}	CaM1N dissociation from Ng	36.0 s ⁻¹	[19]
$K_D^{NgCaM1N}$	Equilibrium binding of CaM1N to Ng	1.29 µM	[19]
$k_{on}^{NgCaM1C}$	CaM1C binding to Ng	23.0 µM ⁻¹ s ⁻¹	[19]
k ^{NgCaM1C}	CaM1C dissociation from Ng	35.0 s ⁻¹	[19]
$K_D^{NgCaM1C}$	Equilibrium binding of CaM1C to Ng	1.52 μM	[19]
$k_{on}^{NgCaM1N1C}$	CaM1N1C binding to Ng	23.0 µM ⁻¹ s ⁻¹	[19]
$k_{off}^{NgCaM1N1C}$	CaM1N1C dissociation from Ng	35.0 s ⁻¹	[19]
$K_{D}^{NgCaM1N1C}$	Equilibrium binding of CaM1N1C to Ng	1.52 μM	[19]
$k_{on}^{NgCaM2N}$	CaM2N binding to Ng	28.0 µM ⁻¹ s ⁻¹	[19]
$k_{off}^{NgCaM2N}$	CaM2N dissociation from Ng	36.0 s ⁻¹	[19]
$K_{\rm D}^{NgCaM2N}$	Equilibrium binding of CaM2N to Ng	1.29 µM	[19]
$k_{on}^{NgCaM2C}$	CaM2C binding to Ng	2.0 µM ⁻¹ s ⁻¹	[19]
$k_{off}^{NgCaM2C}$	CaM2C dissociation from Ng	136.0 s ⁻¹	[19]
$K_{\rm D}^{NgCaM2C}$	Equilibrium binding of CaM2C to Ng	68.0 μM	[19]
$k_{on}^{NgCaM2N1C}$	CaM2N1C binding to Ng	23.0 µM ⁻¹ s ⁻¹	[19]
$k_{off}^{NgCaM2N1C}$	CaM2N1C dissociation from Ng	35.0 s ⁻¹	[19]
$K_{\rm D}^{NgCaM2N1C}$	Equilibrium binding of CaM2N1C to Ng	1.52 μM	[19]
$k_{on}^{NgCaM1N2C}$	CaM1N2C binding to Ng	2.0 µM ⁻¹ s ⁻¹	[19]
$k_{off}^{NgCaM1N2C}$	CaM1N2C dissociation from Ng	136.0 s ⁻¹	[19]
$K_{\rm D}^{NgCaM1N2C}$	Equilibrium binding of CaM1N2C to Ng	68.0 μM	[19]
k_{on}^{NgCaM4}	CaM4 binding to Ng	2.0 µM ⁻¹ s ⁻¹	[19]
k_{off}^{NgCaM4}	CaM4 dissociation from Ng	136.0 s ⁻¹	[19]
K ^{NgCaM4}	Equilibrium binding of CaM4 to Ng	68.0 μM	[19]
Ca ²⁺ binding to Ng-	CaM	· · ·	
k_{on}^{Ng1N}	1st Ca2+ binding to Ng-CaM N-terminus	100.0 µM ⁻¹ s ⁻¹	[19]
k_{off}^{Ng1N}	1st C a ²⁺ dissociation from Ng-CaM N-terminus	2500.0 s ⁻¹	[19]
K_D^{Ng1N}	Equilibrium binding of 1 st Ca ²⁺ to Ng-CaM N-	25.0 µM	[19]
	terminus		
k_{on}^{Ng2N}	2 nd Ca ²⁺ binding to Ng-CaM N-terminus	150.0 μM ⁻¹ s ⁻¹	[19]
k_{off}^{Ng2N}	2 nd Ca ²⁺ dissociation from Ng-CaM N-terminus	750.0 s ⁻¹	[19]
K_D^{Ng2N}	Equilibrium binding of 2 nd Ca ²⁺ to Ng-CaM N-	5.0 µM	[19]
N ~1 C	terminus		[10]
k_{on}^{Ng1C}	1 st Ca ²⁺ binding to Ng-CaM C-terminus	426.0 μM ⁻¹ s ⁻¹	[19]
k_{off}^{Ng1C}	1 st Ca ²⁺ dissociation from Ng-CaM C-terminus	5830.0 s ⁻¹	[19]

K_{D}^{Ng1C}	Equilibrium binding of 1st Ca2+ to Ng-CaM C-		13.7 µM	[19]
D	terminus			
k_{on}^{Ng2C}	2 nd Ca ²⁺ binding to Ng-CaM C-terminus		21.5 µM ⁻¹ s ⁻¹	[19]
k_{off}^{Ng2C}	2 nd Ca ²⁺ dissociation from Ng-CaM C-terminus		418.0 s ⁻¹	[19]
K_D^{Ng2C}	Equilibrium binding of 2 nd Ca ²⁺ to Ng-CaM C-		19.4 µM	[19]
D	terminus			
CaM binding to NO	9S			
$k_{on}^{NOSCaM0}$	CaM0 binding to NOS		0.135 μM ⁻¹ s ⁻¹	[2]
$k_{off}^{NOSCaM0}$	CaM0 dissociation from NOS		0.01 s ⁻¹	[3]
$K_D^{NOSCaM0}$	Equilibrium binding of CaM0 to NOS		0.074 µM	[4]
$k_{on}^{NOSCaM1N}$	CaM1N binding to NOS		0.135 µM ⁻¹ s ⁻¹	[2]
k ^{NOSCaM1N}	CaM1N dissociation from NOS		0.01 s ⁻¹	[3]
K _D ^{NOSCaM1N}	Equilibrium binding of CaM1N to NOS		0.074 µM	[4]
$k_{on}^{NOSCaM1C}$	CaM1C binding to NOS		0.135 μM ⁻¹ s ⁻¹	[2]
$k_{off}^{NOSCaM1C}$	CaM1C dissociation from NOS		0.01 s ⁻¹	[3]
$K_D^{NOSCaM1C}$	Equilibrium binding of CaM1C to NOS		0.074 µM	[4]
k ^{NOSCaM1N1C}	CaM1N1C binding to NOS		0.135 µM ⁻¹ s ⁻¹	[2]
k ^{NOSCaM1N1C}	CaM1N1C dissociation from NOS		0.01 s ⁻¹	[3]
$K_D^{NOSCaM1N1C}$	Equilibrium binding of CaM1N1C to NOS		0.074 µM	[4]
$k_{on}^{NOSCaM2N}$	CaM2N binding to NOS		0.135 µM ⁻¹ s ⁻¹	[2]
k ^{NOSCaM2N}	CaM2N dissociation from NOS		0.01 s ⁻¹	[3]
$K_D^{NOSCaM2N}$	Equilibrium binding of CaM2N to NOS		0.074 µM	[4]
$k_{on}^{NOSCaM2C}$	CaM2C binding to NOS		1.25 µM ⁻¹ s ⁻¹	[2]
$k_{off}^{NOSCaM2C}$	CaM2C dissociation from NOS		0.01 s ⁻¹	[3]
K _D ^{NOSCaM2C}	Equilibrium binding of CaM2C to NOS		0.008 µM	[4]
$k_{on}^{NOSCaM2N1C}$	CaM2N1C binding to NOS		0.135 μM ⁻¹ s ⁻¹	[2]
$k_{off}^{NOSCaM2N1C}$	CaM2N1C dissociation from NOS		0.01 s ⁻¹	[3]
$K_D^{NOSCaM2N1C}$	Equilibrium binding of CaM2N1C to NOS		0.074 µM	[4]
$k_{on}^{NOSCaM1N2C}$	CaM1N2C binding to NOS		1.25 µM ⁻¹ s ⁻¹	[2]
$k_{off}^{NOSCaM1N2C}$	CaM1N2C dissociation from NOS		0.01 s ⁻¹	[3]
K _D ^{NOSCaM1N2C}	Equilibrium binding of CaM1N2C to NOS		0.008 µM	[4]
$k_{on}^{NOSCaM4}$	CaM4 binding to NOS	0.11-660.0 µM ⁻¹ s ⁻¹	1.25 µM ⁻¹ s ⁻¹	[20-22]
$k_{off}^{NOSCaM4}$	CaM4 dissociation from NOS	0.0023-3.7 s ⁻¹	0.01 s ⁻¹	[20-22]
K _D ^{NOSCaM4}	Equilibrium binding of CaM4 to NOS	0.005-5.6 µM	0.008 µM	[20-24]
Ca ²⁺ binding to NO	S-CaM			
k_{on}^{NOS1N}	1st Ca2+ binding to NOS-CaM N-terminus		100.0 µM ⁻¹ s ⁻¹	[6]
k_{off}^{NOS1N}	1st Ca2+ dissociation from NOS-CaM N-		2500.0 s ⁻¹	[25]
- , ,	terminus			
K_D^{NOS1N}	Equilibrium binding of 1st Ca ²⁺ to NOS-CaM		25.0 µM	[2]
	N-terminus			
k_{on}^{NOS2N}	2 nd Ca ²⁺ binding to NOS-CaM N-terminus		150.0 µM ⁻¹ s ⁻¹	[6]

k_{off}^{NOS2N}	2nd Ca ²⁺ dissociation from NOS-CaM N-	750.0 s ⁻¹	[25]
- , ,	terminus		
K _D ^{NOS2N}	Equilibrium binding of 2 nd Ca ²⁺ to NOS-CaM	5.0 µM	[2]
	N-terminus		
k_{on}^{NOS1C}	1st Ca2+ binding to NOS-CaM C-terminus	4.0 μM ⁻¹ s ⁻¹	[6]
k_{off}^{NOS1C}	1st Ca2+ dissociation from NOS-CaM C-	40.0 s ⁻¹	[7]
,,,	terminus		
K_D^{NOS1C}	Equilibrium binding of 1st Ca2+ to NOS-CaM	10.0 µM	[2]
	C-terminus		
k_{on}^{NOS2C}	2nd Ca2+ binding to NOS-CaM C-terminus	10.0 µM ⁻¹ s ⁻¹	[6]
k_{off}^{NOS2C}	2nd Ca2+ dissociation from NOS-CaM C-	1.0 s ⁻¹	[25]
	terminus		
K _D ^{NOS2C}	Equilibrium binding of 2 nd Ca ²⁺ to NOS-CaM	0.1 μM	[2]
_	C-terminus		

References:

[1] S. Pepke et al., "A Dynamic Model of Interactions of Ca²⁺, Calmodulin, and Catalytic Subunits of Ca²⁺/Calmodulin-Dependent Protein Kinase II," *PLoS Comput. Biol.*, vol. 6, no. 2, p. e1000675, 2010.

[2] Calculated from the relationship $K_D = \frac{k_{off}}{k_{on}}$

[3] Assume that Ca²⁺ binding does not affect the rate of protein dissociation from CaM

[4] Calculated from the thermodynamic principle of microscopic reversibility

[5] M. Kim et al., "Colocalization of Protein Kinase A with Adenylyl Cyclase Enhances Protein Kinase A Activity during Long-Lasting Long-Term-Potentiation," *PLoS Comput. Biol.*, vol. 7, no. 6, p. e1002084, 2011.

[6] Assume that protein binding does not affect the rate of Ca²⁺ association to CaM

[7] Assume that protein binding does not affect the fast dissociation rate(s) of Ca²⁺ from CaM

[8] N. Masada et al., "Distinct Mechanisms of Calmodulin Binding and Regulation of Adenylyl Cyclases 1 and 8," *Biochem.*, vol. 51, no. 40, pp. 7917-7929, 2012.

[9] A.R. Quintana et al., "Kinetics of calmodulin binding to calcineurin," BBRC, vol. 334, pp. 674-680, 2005.

[10] M.J. Hubbard and C.B. Klee, "Calmodulin Binding by Calcineurin," J. Biol. Chem., vol. 262, no. 31, pp. 15062-15070, 1987.

[11] E. Takano, M. Hatanaka, and M. Maki, "Real-time analysis of the calcium-dependent interaction between calmodulin and a synthetic oligopeptide of calcineurin by a surface plasmon resonance biosensor," *FEBS Letters*, vol. 352, pp. 247-250, 1994.*

[12] P.M. Stemmer and C.B. Klee, "Dual Calcium Ion Regulation of Calcineurin by Calmodulin and Calcineurin B," *Biochem.*, vol. 33, pp. 6859-6866, 1994.

[13] K. Torok and D.R. Trentham, "Mechanism of 2-Chloro-(ε-amino-Lys₇₅)-[6-[4-(N,N-diethylamino)phenyl]-1,3,5-triazin-4-yl]calmodulin Interactions with Smooth Muscle Myosin Light Chain Kinase and Derived Peptides," *Biochem.*, vol. 33, pp. 12807-12820, 1994. [14] R. Kasturi, C. Vasulka, and J.D. Johnson, "Ca²⁺, Caldesmon, and Myosin Light Chain Kinase Exchange with Calmodulin," *J. Biol. Chem.*, vol. 268, pp. 7958-7964, 1993.

[15] M.C. Potier et al., "The Human Myosin Light Chain Kinase (MLCK) from Hippocampus: Cloning, Sequencing, Expression, and Localization to 3qcen-q21," *Genomics*, vol. 29, no. 3, pp. 562-570, 1995.[†]

[17] J.D. Johnson et al., "Effects of Myosin Light Chain Kinase and Peptides on Ca²⁺ Exchange with the N- and C-terminal Ca²⁺ Binding Sites of Calmodulin," *J. Biol. Chem.*, pp. 761-767, 1996.

[18] O.B. Peersen, T.S. Madsen, and J.J. Falke, "Intermolecular tuning of calmodulin by target peptides and proteins: Differential effects of Ca²⁺ binding and implications for kinase activation," *Protein Sci.*, vol. 6, pp. 794-807, 1997.*

[19] Y. Kubota, J. Putkey, and M. Waxham, "Neurogranin Controls the Spatiotemporal Pattern of Postsynaptic Ca²⁺/CaM signaling," *Biophys. J.*, vol. 93, pp. 3848-3859, 2007.

[20] J.L. McMurry et al., "Rate, Affinity and Calcium Dependence of Nitric Oxide Synthase Isoform Binding to the Primary Physiological Regulator Calmodulin," *FEBS J.*, vol. 278, pp. 4943-4954, 2011.

[21] G. Wu, V. Berka, and A. Tsai, "Binding Kinetics of Calmodulin with Target Peptides of Three Nitric Oxide Synthase Isozymes," *J. Inorg. Biochem.*, vol. 105, pp. 1226-1237, 2011.*

[22] M. Zoche et al., "Distinct Molecular Recognition of Calmodulin-Binding Sites in the Neuronal and Macrophage Nitric Oxide Synthases: A Surface Plasmon Resonance Study," *Biochem.*, vol. 35, pp. 8742-8747, 1996.*

[23] E.A. Sheta, K. McMillan, and B.S. Siler Masters, "Evidence for a Bidomain Structure of Constitutive Cerebellar Nitric Oxide Synthase," *J. Biol. Chem.*, vol. 269, no. 21, pp. 15147-15153, 1994.

[24] B.A. Weissman et al., "Activation and Inactivation of Neuronal Nitric Oxide Synthase: Characterization of Ca²⁺-dependent
 [¹²⁵I]Calmodulin Binding," *Eur. J. Pharm.*, vol. 435, pp. 9-18, 2002.

[25] A. Persechini, H.D. White, and K.J. Gansz, "Different Mechanisms for Ca²⁺ Dissociation from Complexes of Calmodulin with Nitric Oxide Synthase or Myosin Light Chain Kinase," *J. Biol. Chem.*, vol. 271, no. 1, pp. 62-67, 1996.

*Not used in calculating average value because study used oligopeptide instead of protein

[†]Used to establish equivalence of smooth muscle and hippocampal MLCK

[‡]Used to select rates of MLCK association to and dissociation from Ca²⁺₄CaM

[§]Used to select rates of Ca²⁺ dissociation from NOS-CaM