

**SUPPLEMENTAL FIGURE 1.** Examples of the fit of muscle TAC data obtained in control (A) and in blocking (B) studies performed on the same animal, using 1TCM modeling (dashed line) and 2TCM modeling (solid line).

**SUPPLEMENTAL TABLE 1**

Absence of Correlation Between the VD in Muscle and the Fraction of Parent Compound Measured in Blood 5 Hours After Injection of 2-FA ( $r = 0.06$  Measured in 15 Different Monkeys)

Monkey no.	% Parent compound	VD muscle
1	39%	3.4
2	42%	2.6
3	44%	3.3
4	45%	3.1
5	49%	3.0
6	51%	3.0
7	52%	2.6
8	53%	3.0
9	54%	3.0
10	56%	2.7
11	56%	3.2
12	64%	2.9
13	66%	3.0
14	67%	3.2
15	70%	3.3
Average	54%	3.0
SD	10%	0.2
CV	18%	8%

**SUPPLEMENTAL TABLE 2**

Test-Retest Comparison of the Binding Potential Values Obtained in Various Brain Regions

Using the SRTM Approach and Muscle (BP\*msl) or Cerebellum (BP\*cb) as Reference Regions

Monkey no.	Using SRTM and cerebellum as reference region									Using SRTM and muscle as reference region								
	Thalamus			Midbrain			Cortex			Thalamus			Midbrain			Cortex		
	BP*	Mean	CV	BP*	Mean	CV	BP*	Mean	CV	BP*	Mean	CV	BP*	Mean	CV	BP*	Mean	CV
1	2.78	2.80	1%	1.32	1.28	4%	0.91	0.88	6%	2.81	2.97	8%	1.48	1.50	2%	0.96	1.01	7%
	2.81			1.24			0.84			3.13			1.52			1.07		
2	2.87	2.83	9%	1.12	1.09	13%	0.67	0.63	1%	3	2.78	11%	1.65	1.27	27%	1.09	0.88	21%
	3.07			1.22			0.72			2.9			1.2			0.75		
	2.56			0.94			0.5			2.43			0.96			0.8		
3	3.63	3.45	9%	1.26	1.38	10%	0.76	0.91	16%	3.39	3.40	6%	1.27	1.35	7%	0.82	0.92	9%
	3.61			1.54			1.06			3.6			1.33			0.95		
	3.11			1.35			0.91			3.21			1.46			0.98		
4	2.44	2.34	6%	1.09	1.16	8%	0.69	0.66	8%	2.18	2.23	4%	1.42	1.36	6%	0.96	0.83	22%
	2.23			1.22			0.62			2.29			1.31			0.7		
5	2.93	2.67	12%	1.28	1.22	5%	0.9	0.87	4%	3.08	2.81	12%	1.42	1.29	10%	0.99	0.95	4%
	2.75			1.18			0.84			2.9			1.28			0.94		
	2.33			1.19			0.86			2.44			1.17			0.92		
6	1.45	1.29	18%	0.54	0.56	5%	0.4	0.40	0%	1.56	1.56	0%	0.58	0.65	16%	0.4	0.46	19%
	1.12			0.58			0.4			1.56			0.72			0.53		
7	2.1	2.58	19%	0.99	1.18	17%	0.66	0.81	19%	2.52	2.85	14%	1.39	1.40	9%	0.89	0.96	11%
	3.06			1.39			0.97			3.29			1.53			1.08		
	2.59			1.16			0.79			2.75			1.28			0.91		
Mean		2.56	11%		1.12	9%		0.73	8%		2.66	8%		1.26	11%		0.86	13%