

**Supplemental Table 1. Distribution of Labeled Cells in V1 Layer 2/3 Following Tracer Injections in V2**

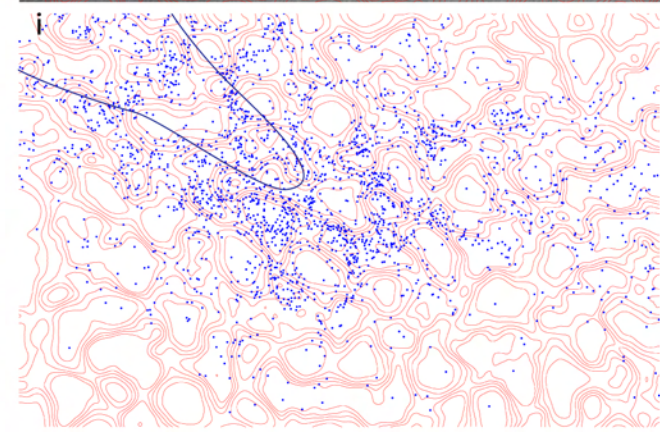
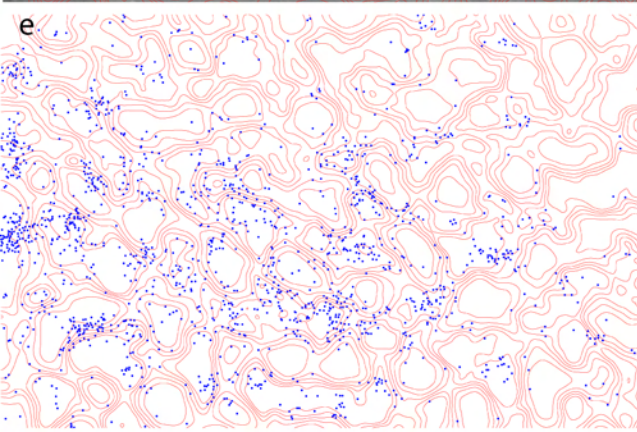
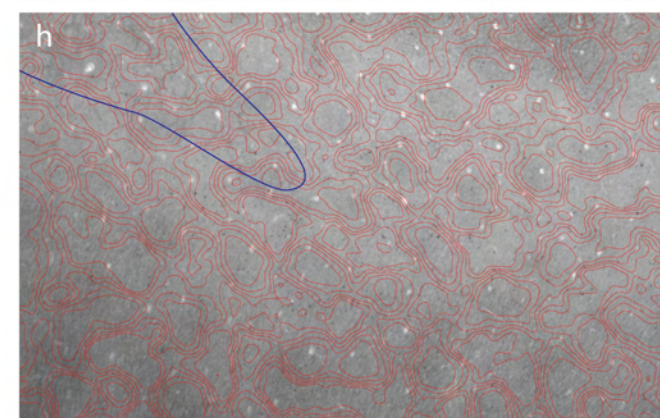
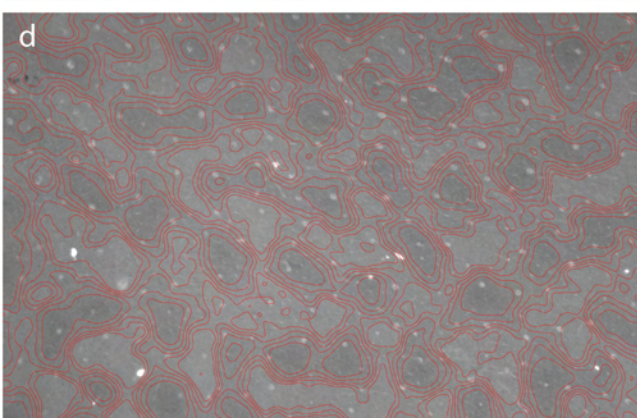
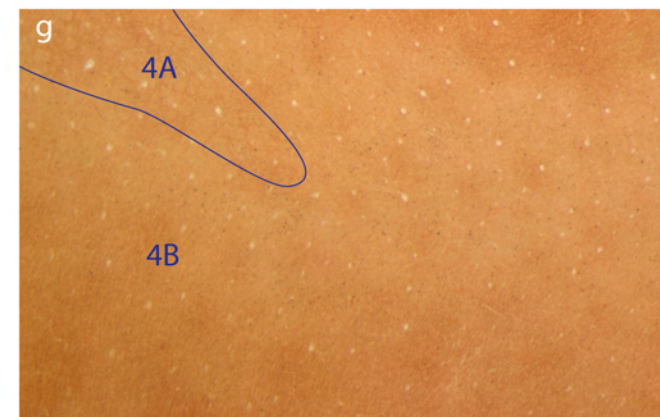
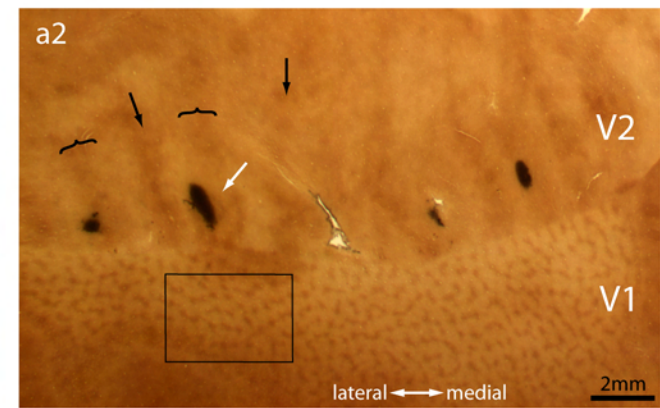
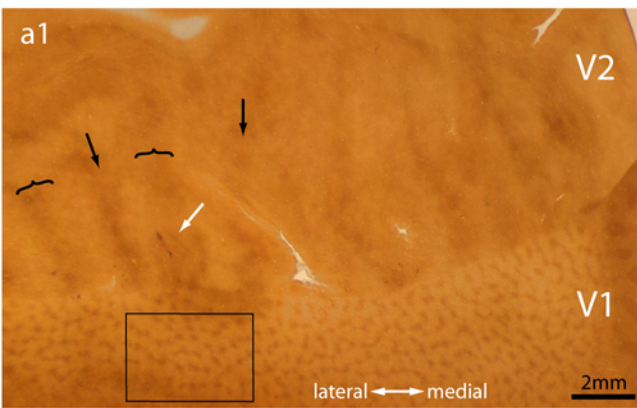
	Patches		Interpatches				Total	% Interpatch
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6		
<b>Thick Stripe</b>								
<i>Injection 1</i> (Fig.1,2)	376 (4%)	944 (9%)	1376 (14%)	1795 (18%)	2423 (24%)	3066 (31%)	9980	87%
<i>Injection 2</i> (Fig.4,5)	77 (2%)	523 (11%)	955 (19%)	1249 (25%)	1158 (24%)	958 (19%)	4920	87%
<i>Injection 3</i> (Fig.S1)	184 (12%)	229 (15%)	247 (16%)	275 (17%)	325 (21%)	319 (20%)	1579	74%
<i>Injection 4</i> (Fig.S2)	99 (2%)	231 (4%)	600 (10%)	1199 (20%)	1704 (28%)	2153 (36%)	5986	94%
<i>Injection 5</i> (Fig.S3)	25 (2%)	197 (15%)	359 (27%)	347 (26%)	296 (22%)	107 (8%)	1331	83%
<i>Injection 6</i> (Fig.S4)	131 (5%)	344 (13%)	490 (18%)	564 (21%)	601 (23%)	540 (20%)	2670	82%
<i>Injection 7</i> (Fig.S5)	143 (5%)	291 (12%)	404 (16%)	586 (22%)	621 (24%)	560 (21%)	2605	83%
<i>Injection 8</i> (Fig.S6)	58 (4%)	145 (11%)	247 (18%)	278 (20%)	310 (23%)	332 (24%)	1370	85%
<b>Mean Percentage</b>	<b>5%</b>	<b>11%</b>	<b>17%</b>	<b>21%</b>	<b>24%</b>	<b>22%</b>	<b>30,441</b>	<b>84%</b>
<b>Pale Stripe</b>								
<i>Injection 9</i> (Fig.6,7)	755 (8%)	1285 (14%)	1746 (19%)	1808 (20%)	1994 (22%)	1615 (17%)	9203	78%
<i>Injection 10</i> (Fig.9,10,11)	515 (9%)	739 (12%)	945 (16%)	1171 (20%)	1191 (20%)	1364 (23%)	5925	79%
<i>Injection 11</i> (Fig.S7)	189 (4%)	474 (9%)	872 (16%)	1301 (24%)	1317 (25%)	1171 (22%)	5324	87%
<i>Injection 12</i> (Fig.S8)	244 (8%)	499 (15%)	621 (19%)	720 (23%)	654 (20%)	497 (15%)	3235	77%
<i>Injection 13</i> (Fig.S9)	66 (2%)	248 (8%)	402 (13%)	535 (17%)	708 (22%)	1218 (38%)	3177	90%
<i>Injection 14</i> (Fig.S10)	47 (1%)	272 (9%)	532 (16%)	775 (24%)	903 (28%)	714 (22%)	3243	90%
<i>Injection 15</i> (Fig.S11)	28 (4%)	88 (12%)	131 (18%)	151 (21%)	201 (28%)	127 (17%)	726	84%
<i>Injection 16</i> (Fig.S12)	394 (4%)	1008 (11%)	1541 (17%)	1756 (19%)	2137 (23%)	2361 (16%)	9197	85%
<b>Mean Percentage</b>	<b>5%</b>	<b>11%</b>	<b>17%</b>	<b>21%</b>	<b>24%</b>	<b>23%</b>	<b>40,030</b>	<b>84%</b>

**Supplemental Table 2. Distribution of Labeled Cells in V1 Layer 4B Following Tracer Injections in V2**

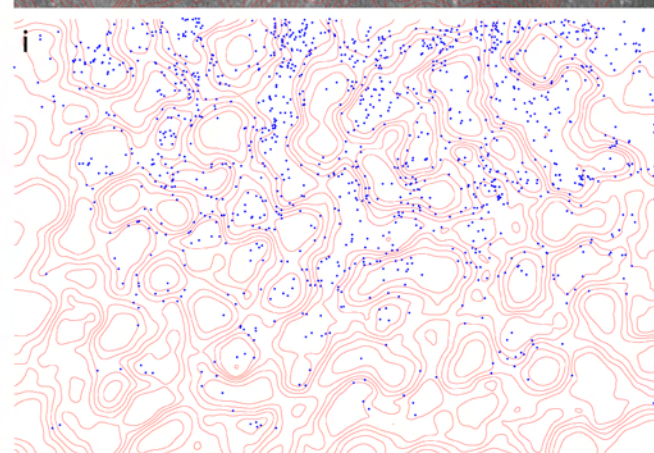
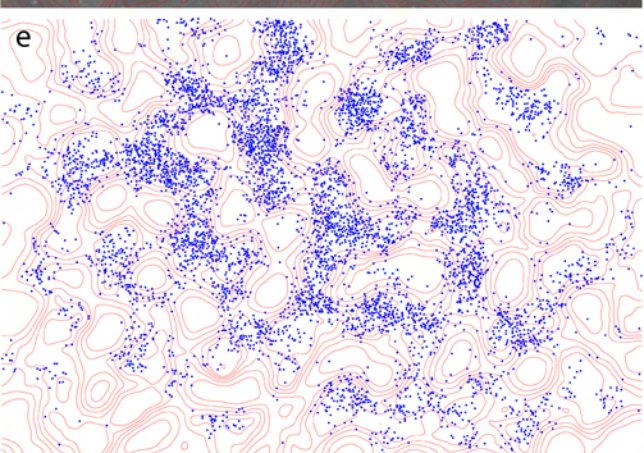
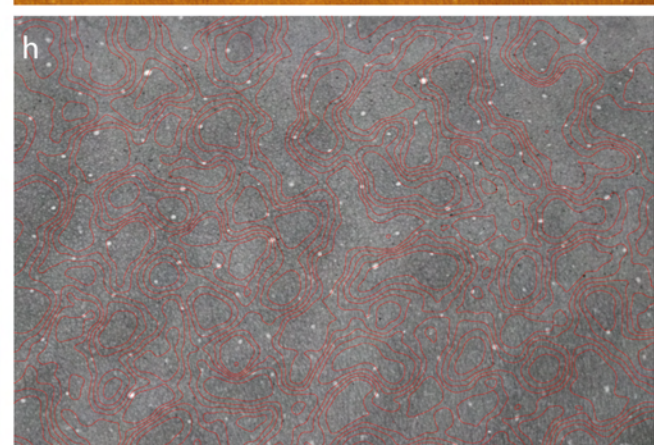
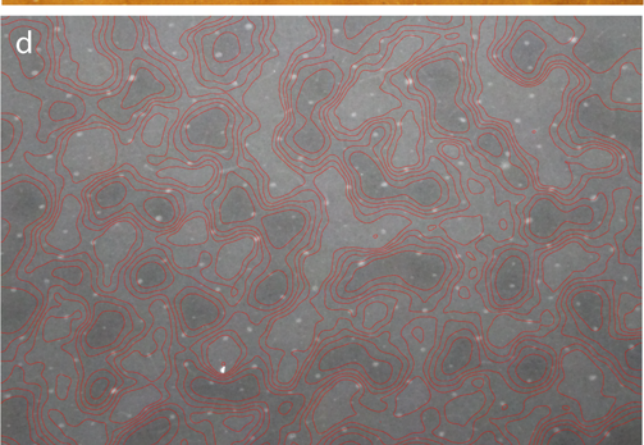
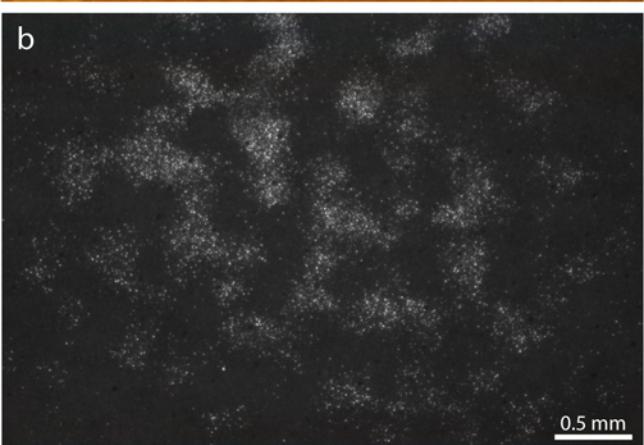
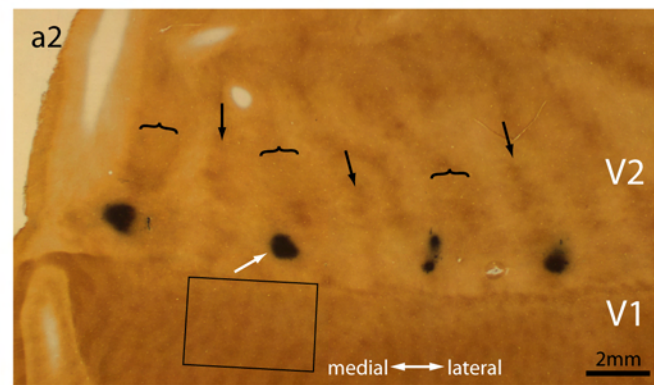
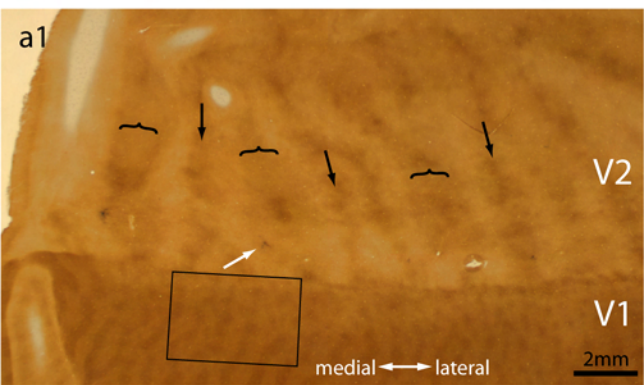
	Patches		Interpatches				Total	% Interpatch
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6		
<b>Thick Stripe</b>								
<i>Injection 1</i> (Fig.1,3)	860 (12%)	1106 (16%)	1010 (15%)	1128 (16%)	1286 (19%)	1554 (22%)	6944	72%
<i>Injection 2</i>	64 (6%)	187 (18%)	285 (27%)	239 (22%)	177 (17%)	105 (10%)	1057	76%
<i>Injection 3</i> (Fig.S1)	126 (5%)	320 (14%)	398 (17%)	481 (20%)	539 (23%)	500 (21%)	2364	81%
<i>Injection 4</i> (Fig.S2)	110 (8%)	154 (12%)	219 (17%)	186 (14%)	260 (21%)	370 (28%)	1299	80%
<i>Injection 5</i> (Fig.S3)	360 (17%)	447 (21%)	410 (19%)	386 (18%)	305 (14%)	245 (11%)	2153	63%
<i>Injection 6</i> (Fig.S4)	144 (8%)	272 (16%)	297 (18%)	313 (18%)	355 (20%)	356 (20%)	1737	76%
<i>Injection 7</i> (Fig.S5)	196 (8%)	398 (16%)	384 (15%)	456 (18%)	492 (19%)	621 (24%)	2547	76%
<i>Injection 8</i> (Fig.S6)	80 (8%)	124 (13%)	186 (19%)	163 (17%)	197 (20%)	229 (23%)	979	79%
<b>Mean Percentage</b>	<b>9%</b>	<b>16%</b>	<b>18%</b>	<b>18%</b>	<b>19%</b>	<b>20%</b>	<b>19,080</b>	<b>75%</b>
<b>Pale Stripe</b>								
<i>Injection 9</i> (Fig.6,8) M*	654 (12%)	883 (15%)	1086 (19%)	1012 (18%)	1143 (20%)	927 (16%)	5705	73%
<i>Injection 10</i> L*	115 (11%)	148 (15%)	136 (14%)	178 (18%)	186 (19%)	242 (23%)	1005	74%
<i>Injection 11</i> (Fig.S7) L	116 (12%)	167 (17%)	179 (19%)	188 (20%)	153 (16%)	155 (16%)	958	71%
<i>Injection 12</i> (Fig.S8) M	139 (13%)	210 (19%)	207 (19%)	224 (21%)	192 (18%)	112 (10%)	1084	68%
<i>Injection 13</i> (Fig.S9) M	51 (8%)	76 (13%)	89 (15%)	66 (11%)	119 (20%)	197 (33%)	598	79%
<i>Injection 14</i> (Fig.S10) M	221 (11%)	342 (17%)	392 (20%)	412 (21%)	351 (18%)	270 (13%)	1988	72%
<i>Injection 15</i> (Fig.S11) L	55 (12%)	79 (18%)	78 (17%)	77 (17%)	78 (17%)	83 (19%)	450	70%
<i>Injection 16</i> (Fig.S12) M	180 (16%)	187 (16%)	179 (16%)	156 (13%)	202 (18%)	236 (21%)	1140	68%
<b>Mean Percentage</b>	<b>12%</b>	<b>16%</b>	<b>17%</b>	<b>18%</b>	<b>18%</b>	<b>19%</b>	<b>12,928</b>	<b>72%</b>

\* M = Pale stripe medial to a thick stripe, L = Pale stripe lateral to a thick stripe

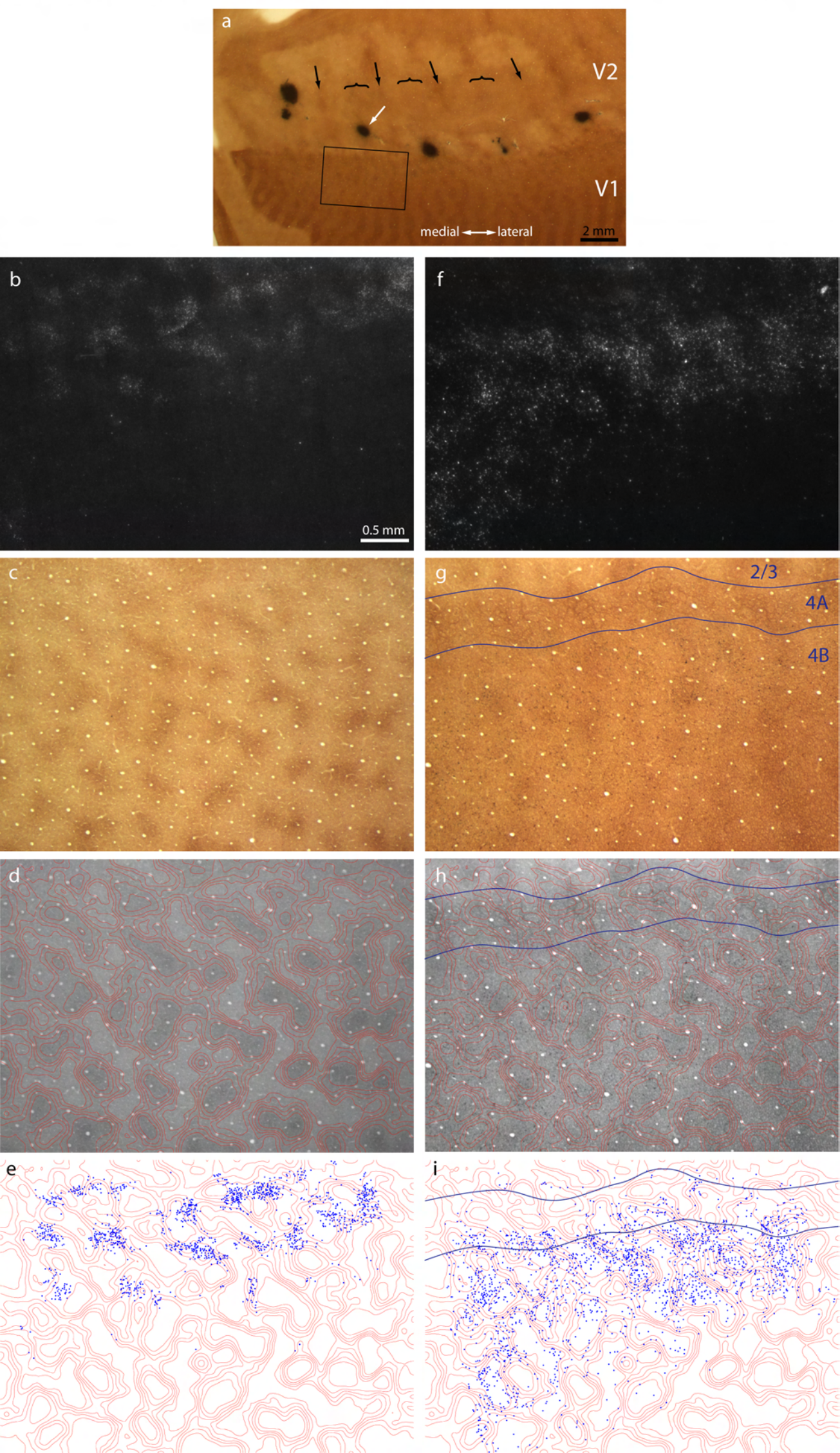
Supplemental Figure 1. Thick stripe injection 3 before silver intensification (a1), and after silver intensification (a2). Cell labeling and CO density plots in layer 2/3 (b-e) and layer 4B (f-i).



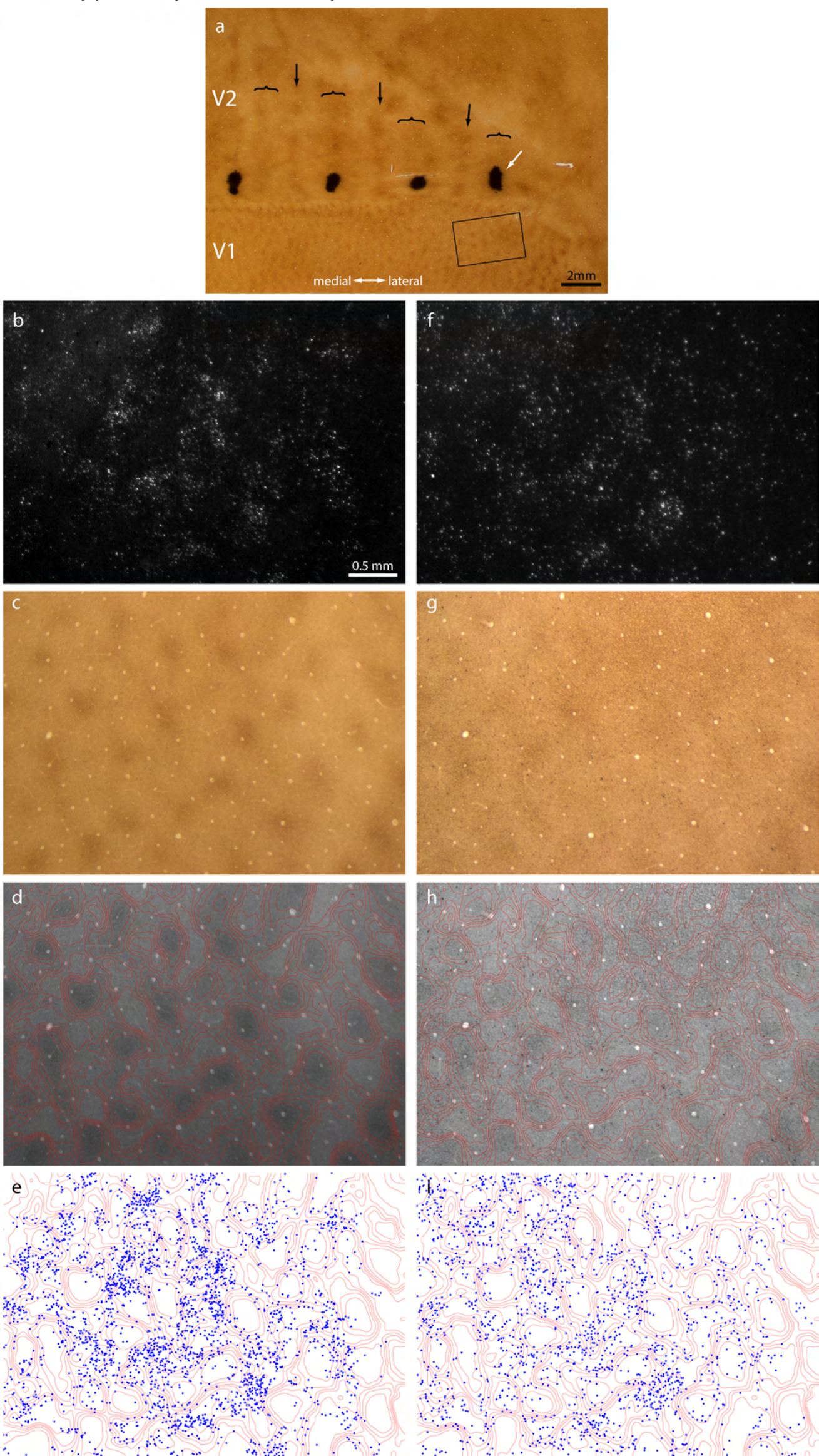
Supplemental Figure 2. Thick stripe injection 4 before silver intensification (a1), and after silver intensification (a2). Cell labeling and CO density plots in layer 2/3 (b-e) and layer 4B (f-i).



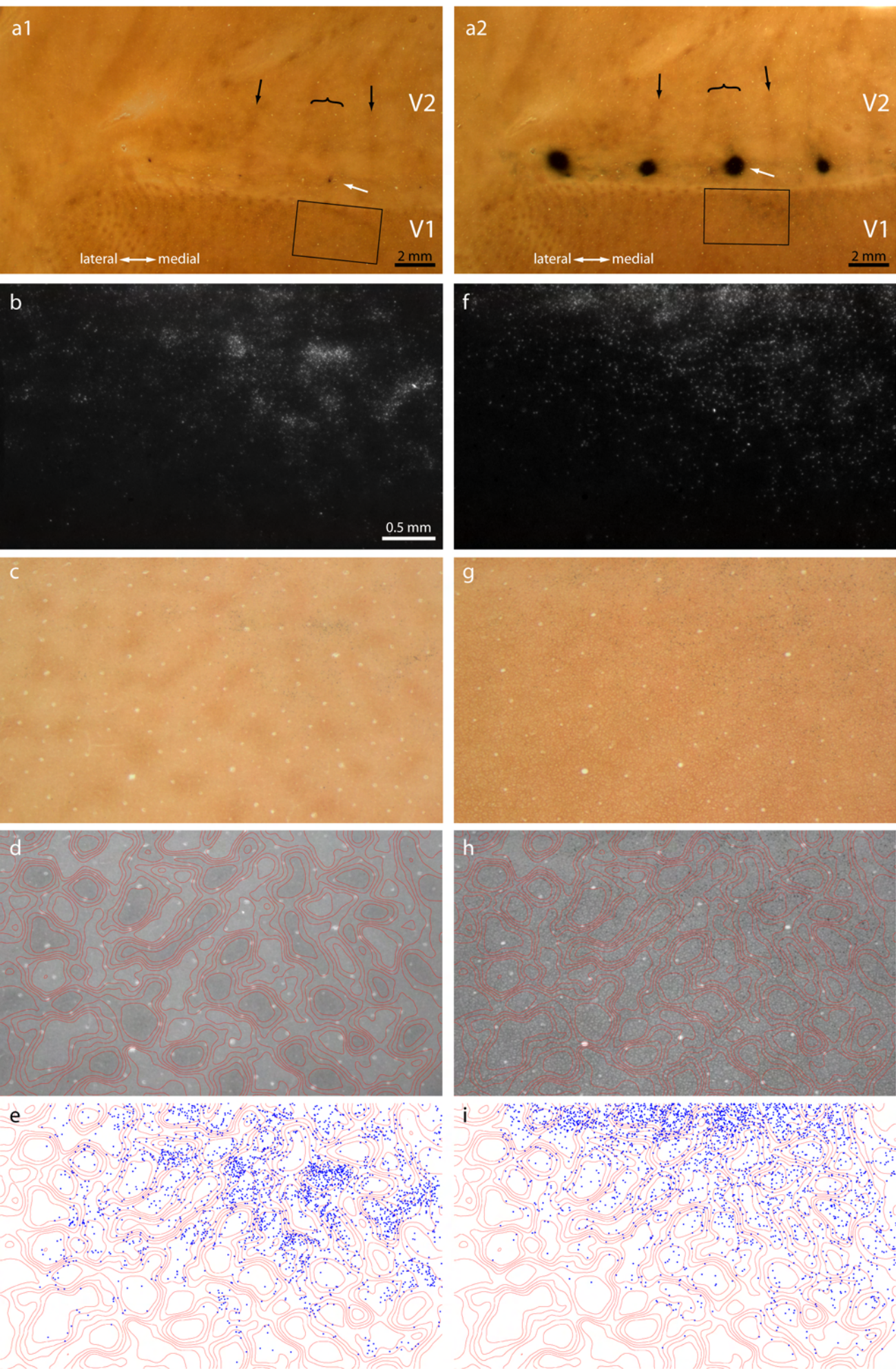
Supplemental Figure 3. Thick stripe injection 5 after silver intensification (a). Cell labeling and CO density plots in layer 2/3 (b-e) and layer 4B (f-i).



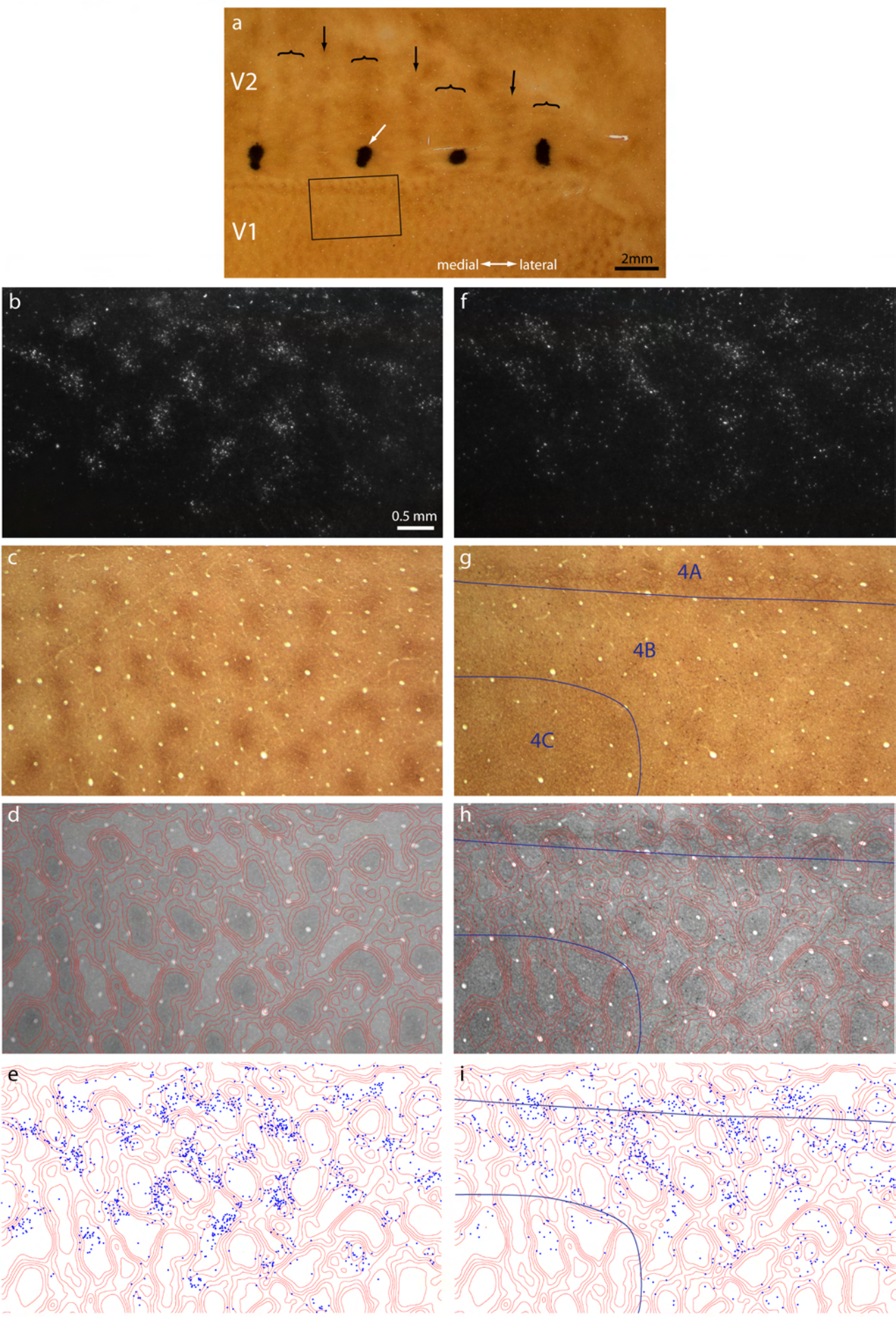
Supplemental Figure 4. Thick stripe injection 6 after silver intensification (a). Cell labeling and CO density plots in layer 2/3 (b-e) and layer 4B (f-i).



Supplemental Figure 5. Thick stripe injection 7 before silver intensification (a1), and after silver intensification (a2). Cell labeling and CO density plots in layer 2/3 (b-e) and layer 4B (f-i).

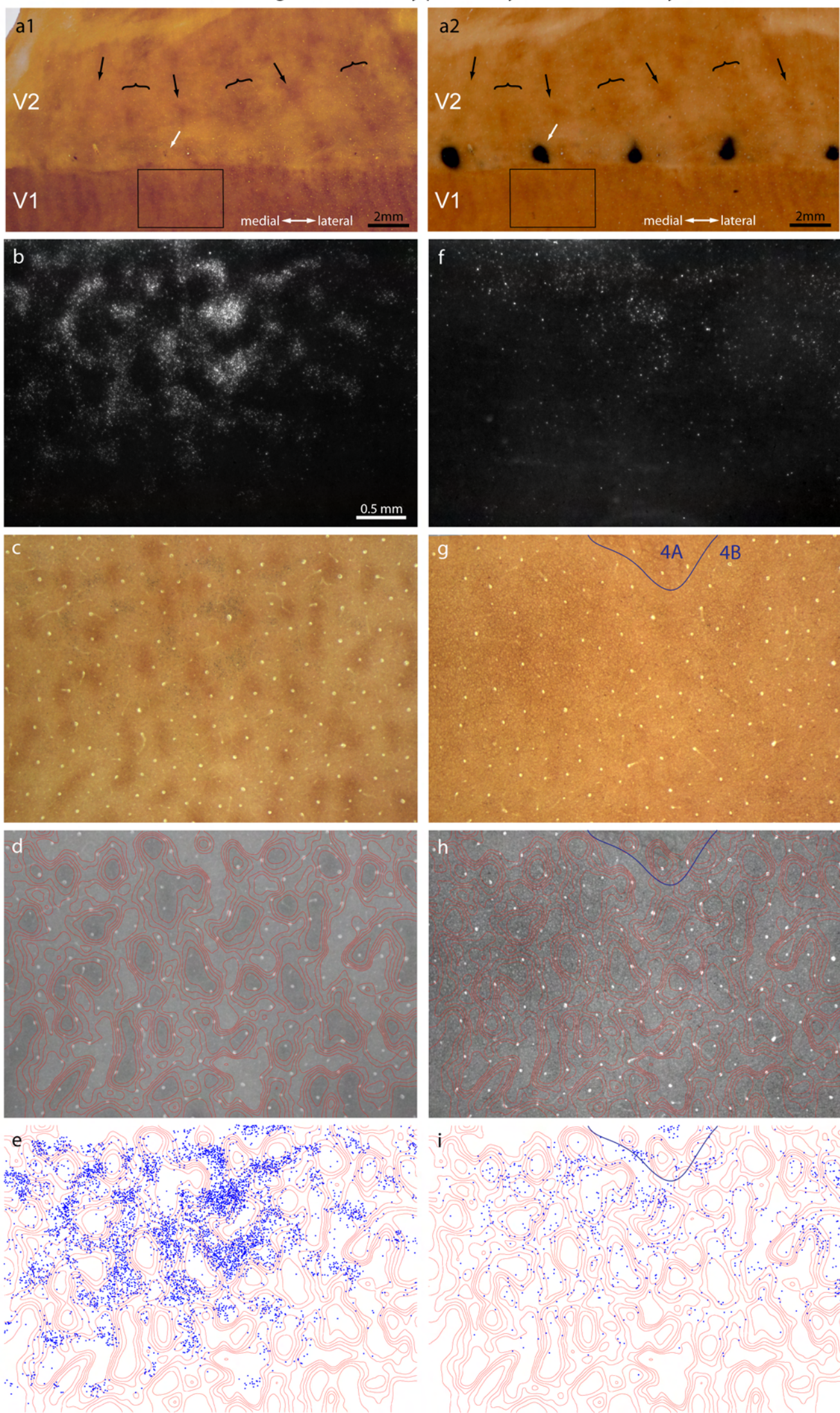


Supplemental Figure 6. Thick stripe injection 8 after silver intensification (a). Cell labeling and CO density plots in layer 2/3 (b-e) and layer 4B (f-i).

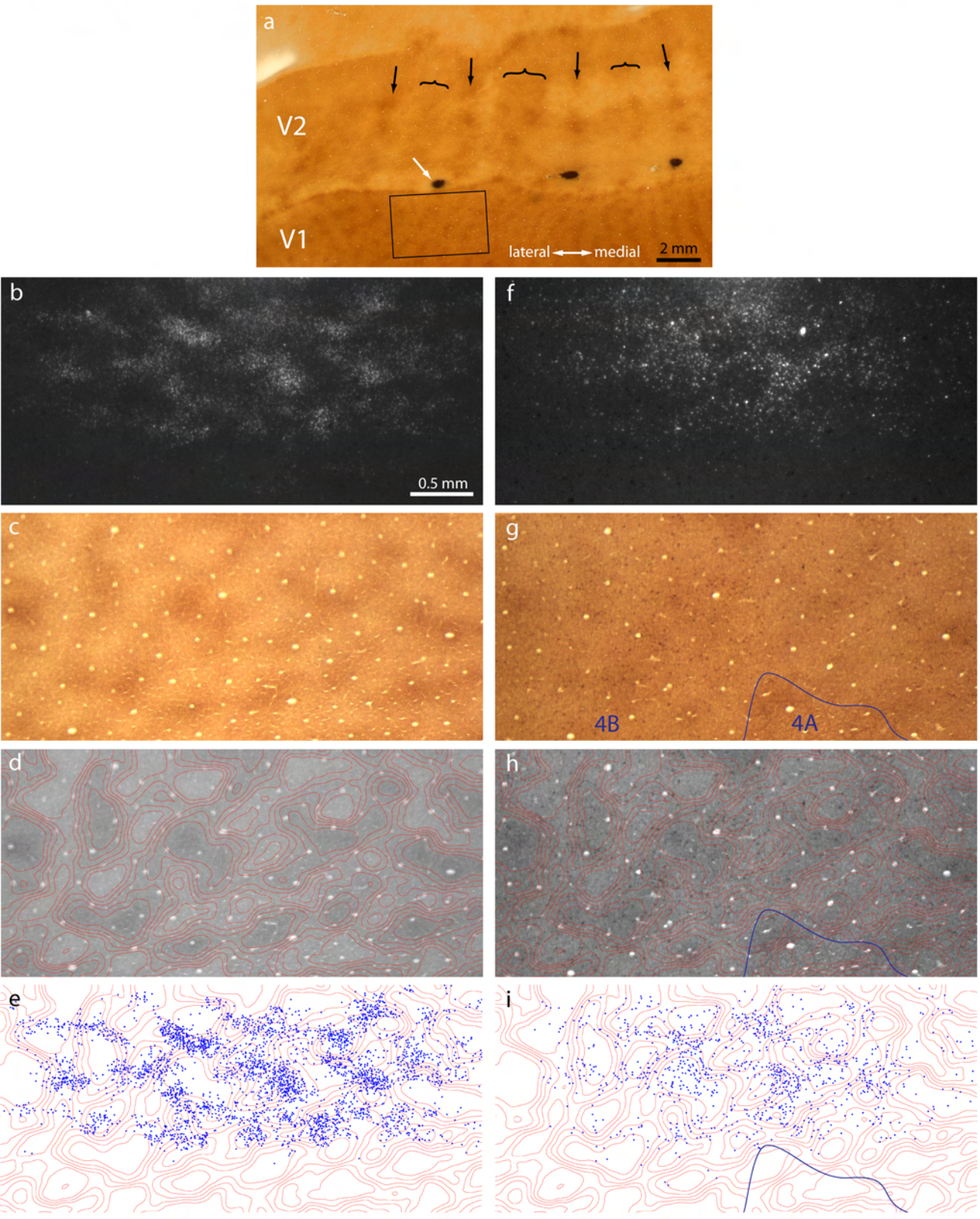




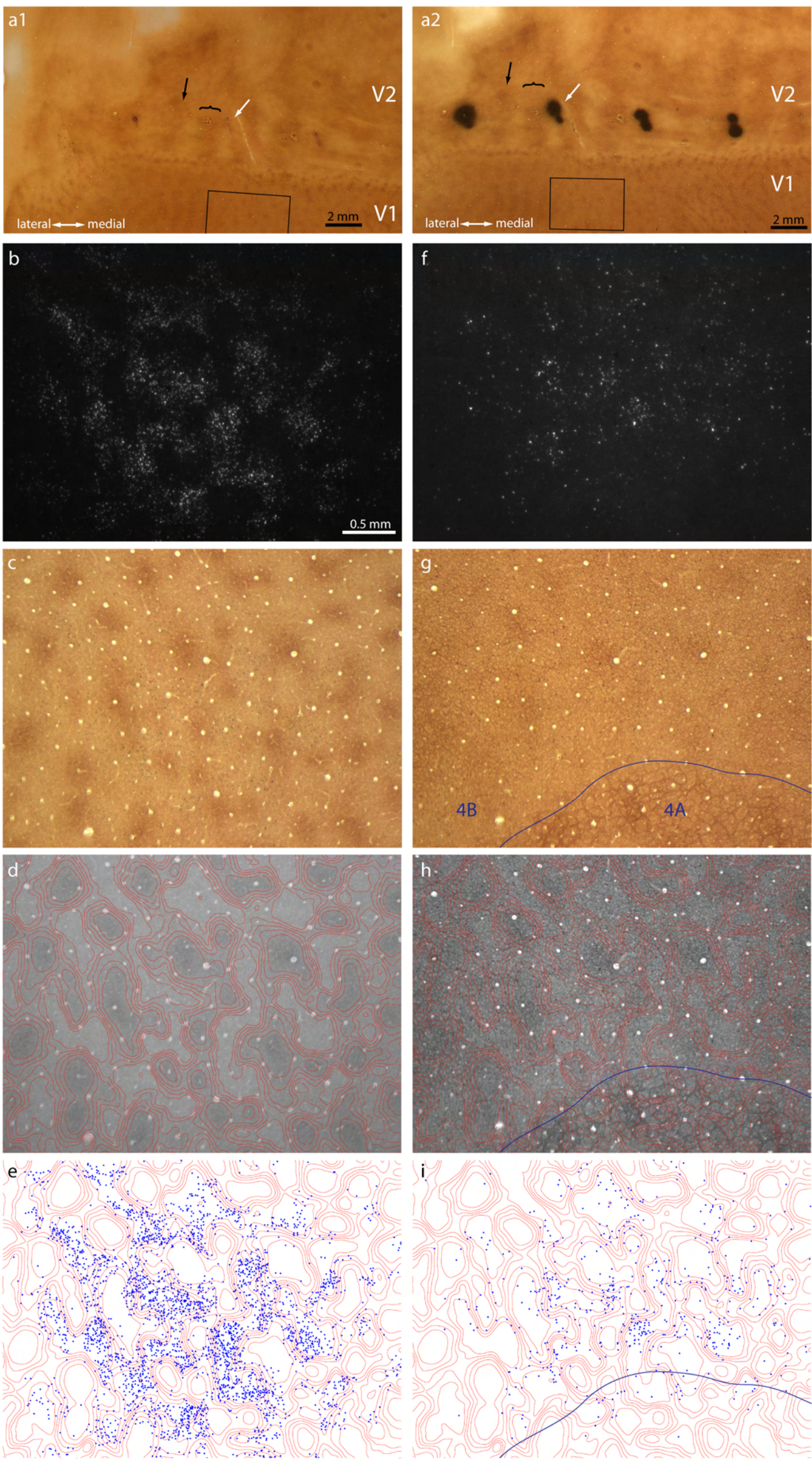
Supplemental Figure 7. Pale stripe injection 11 before silver intensification (a1), and after silver intensification (a2). Cell labeling and CO density plots in layer 2/3 (b-e) and layer 4B (f-i).



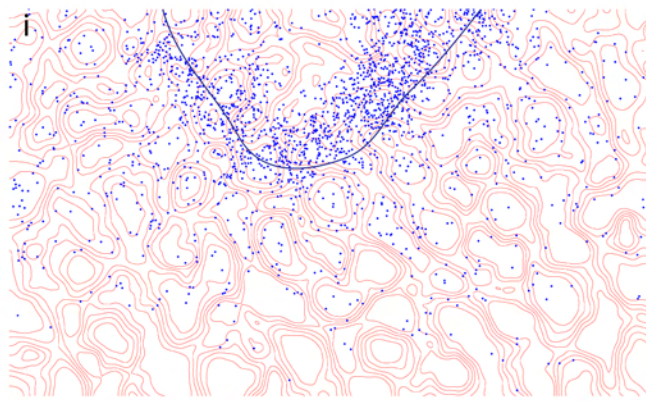
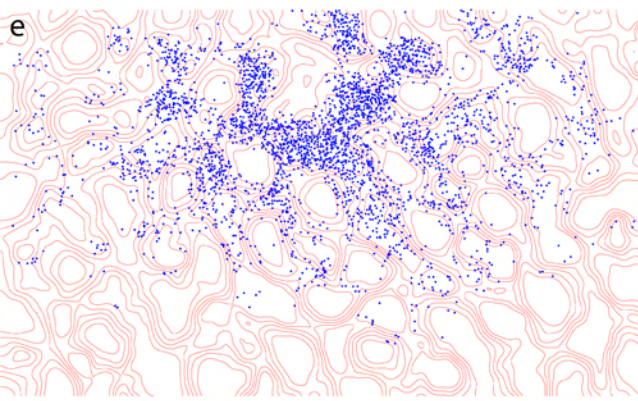
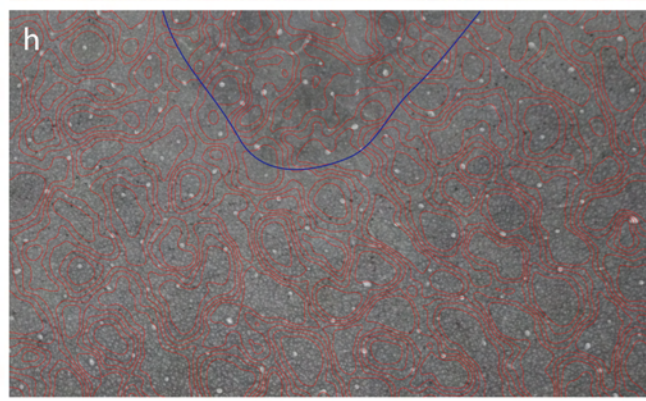
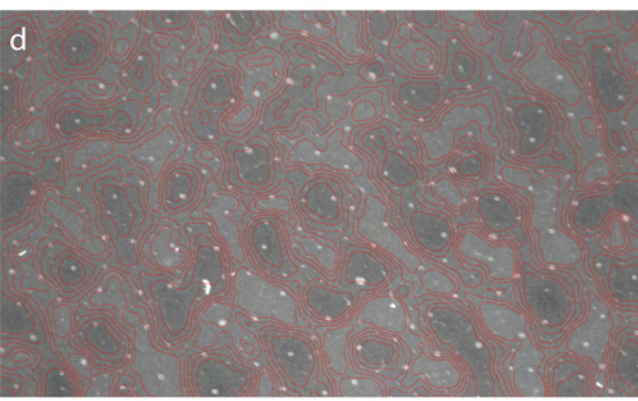
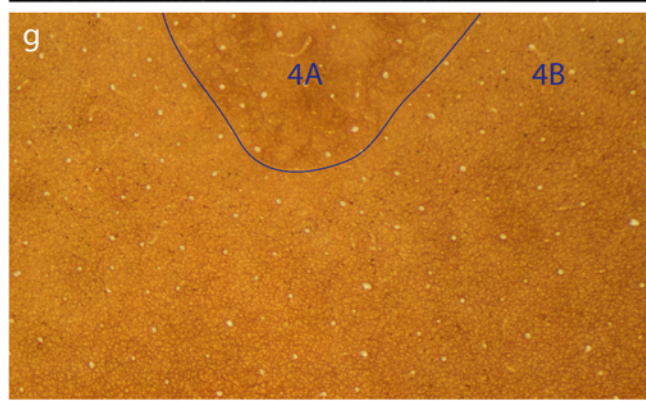
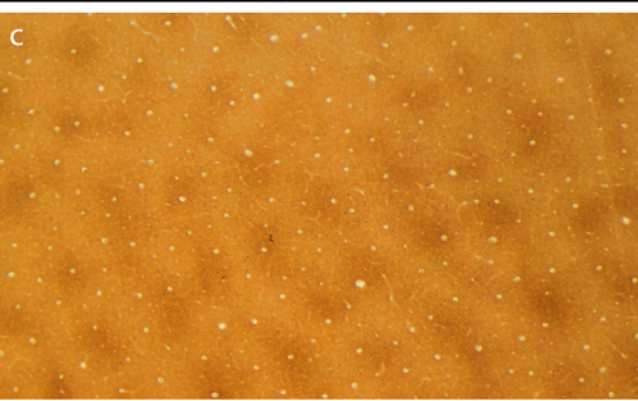
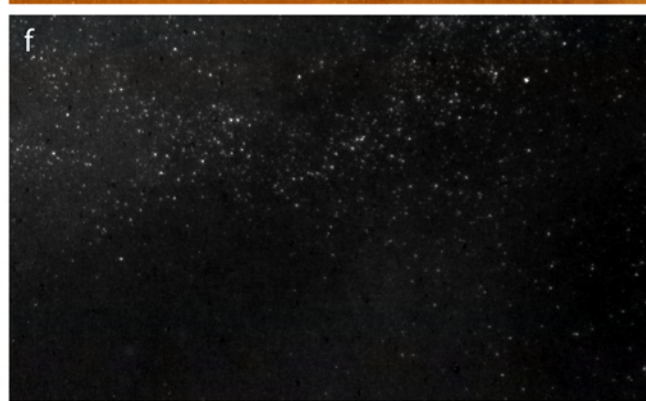
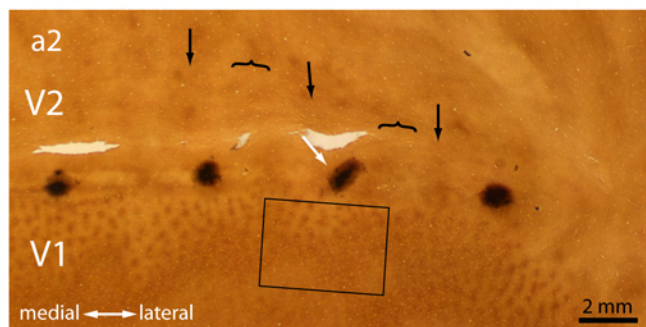
Supplemental Figure 8. Pale stripe injection 12 after silver intensification (a). Cell labeling and CO density plots in layer 2/3 (b-e) and layer 4B (f-i).



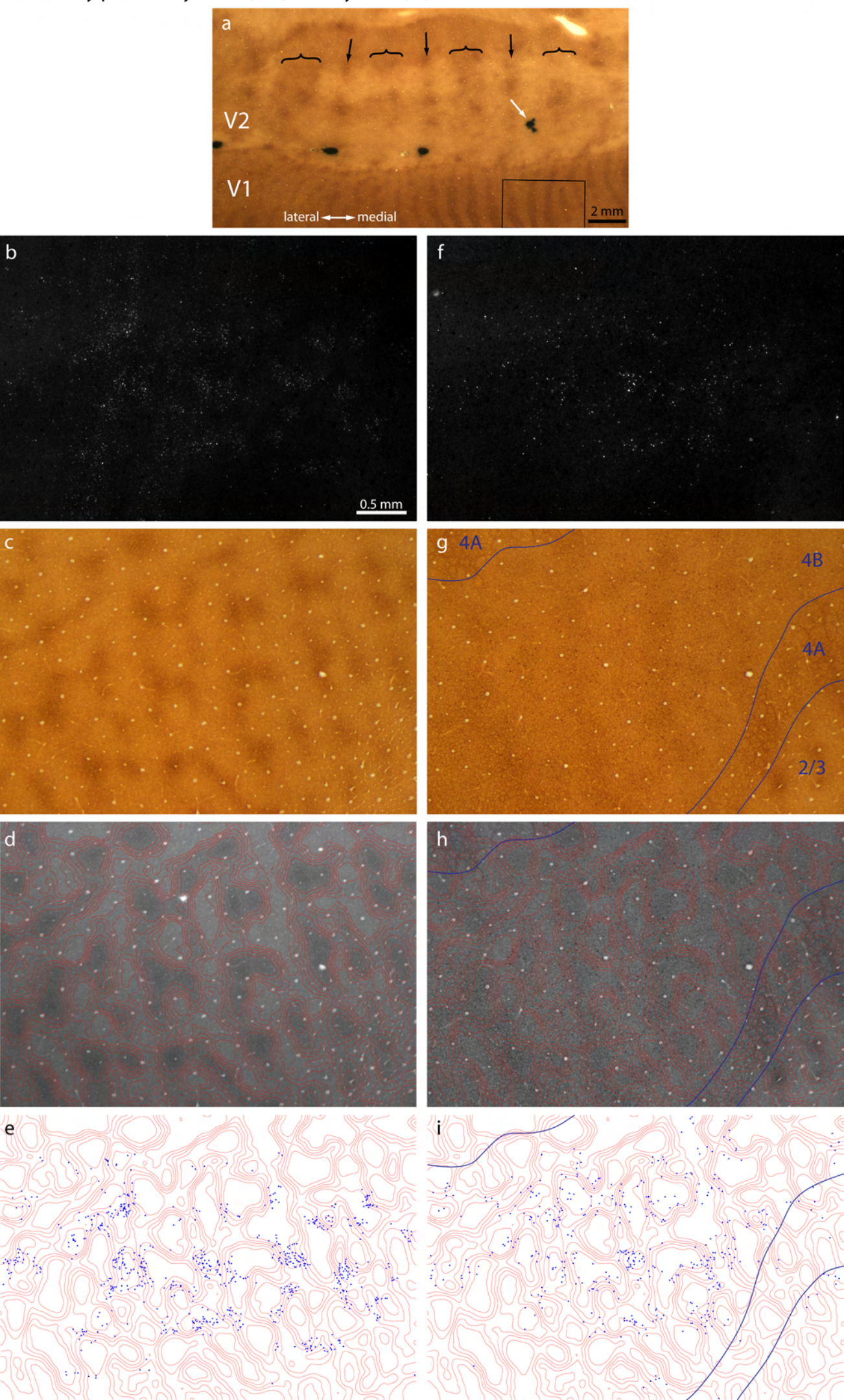
Supplemental Figure 9. Pale stripe injection 13 before silver intensification (a1), and after silver intensification (a2). Cell labeling and CO density plots in layer 2/3 (b-e) and layer 4B (f-i).



Supplemental Figure 10. Pale stripe injection 14 before silver intensification (a1), and after silver intensification (a2). Cell labeling and CO density plots in layer 2/3 (b-e) and layer 4B (f-i).



Supplemental Figure 11. Pale stripe injection 15 after silver intensification (a). Cell labeling and CO density plots in layer 2/3 (b-e) and layer 4B (f-i).



Supplemental Figure 12. Pale stripe injection 16 before silver intensification (a1), and after silver intensification (a2). The dark stripe types are poorly distinguished, but the injection is clearly in a pale stripe. Cell labeling and CO density plots in layer 2/3 (b-e) and layer 4B (f-i).

