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Sriram et al.

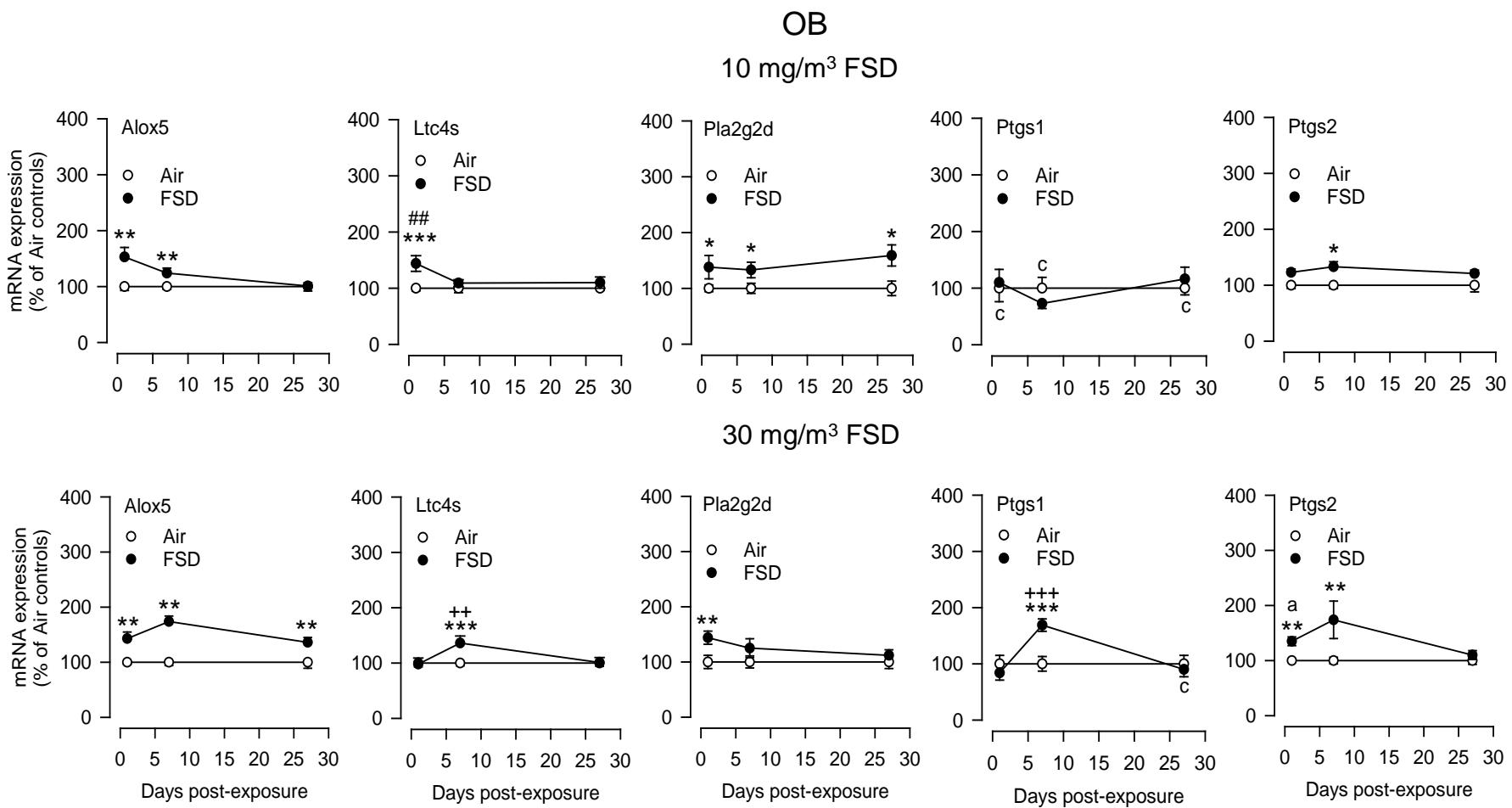


Fig. 2
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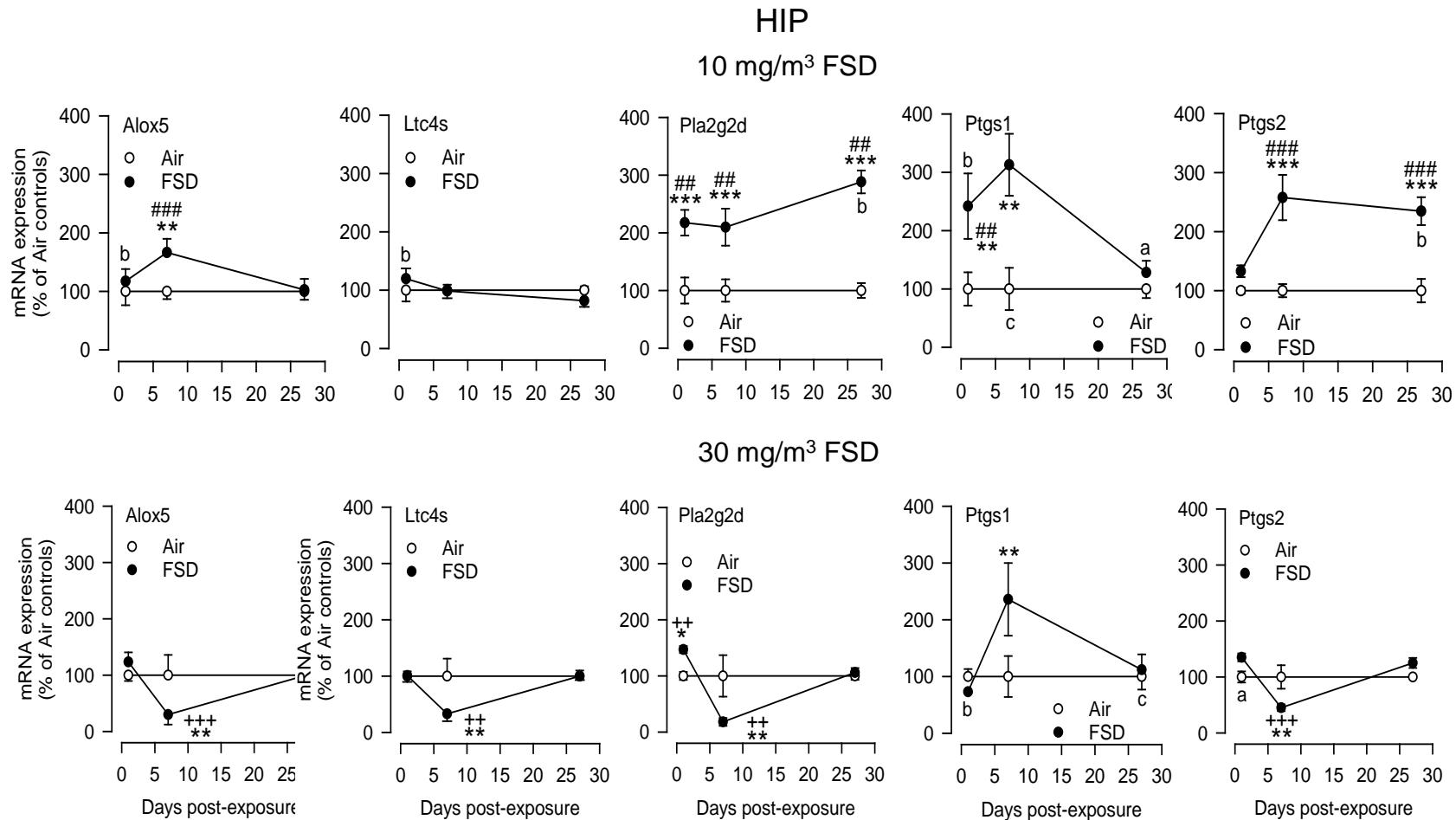


Fig. 3
Sriram et al.

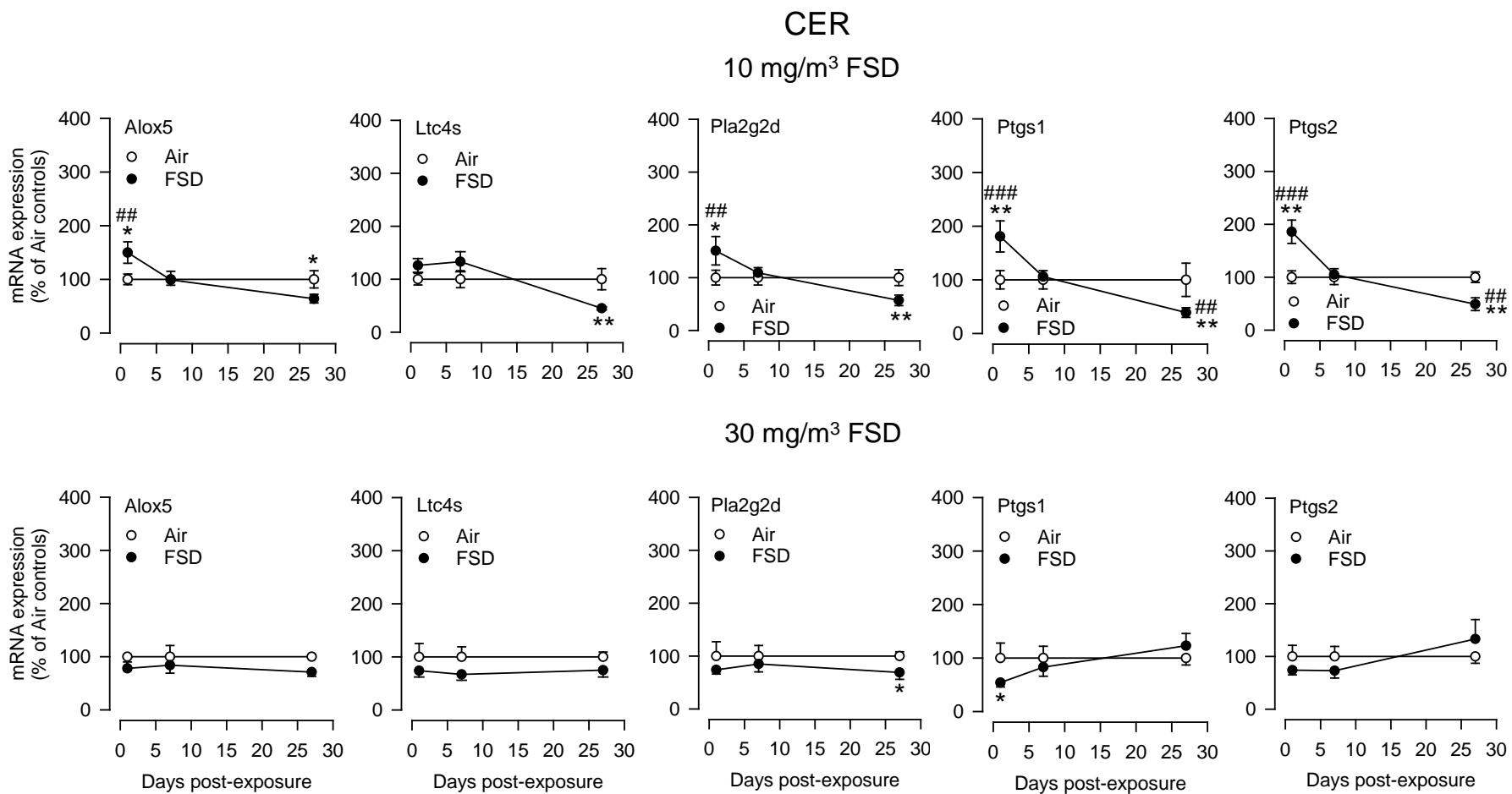


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Sriram et al.

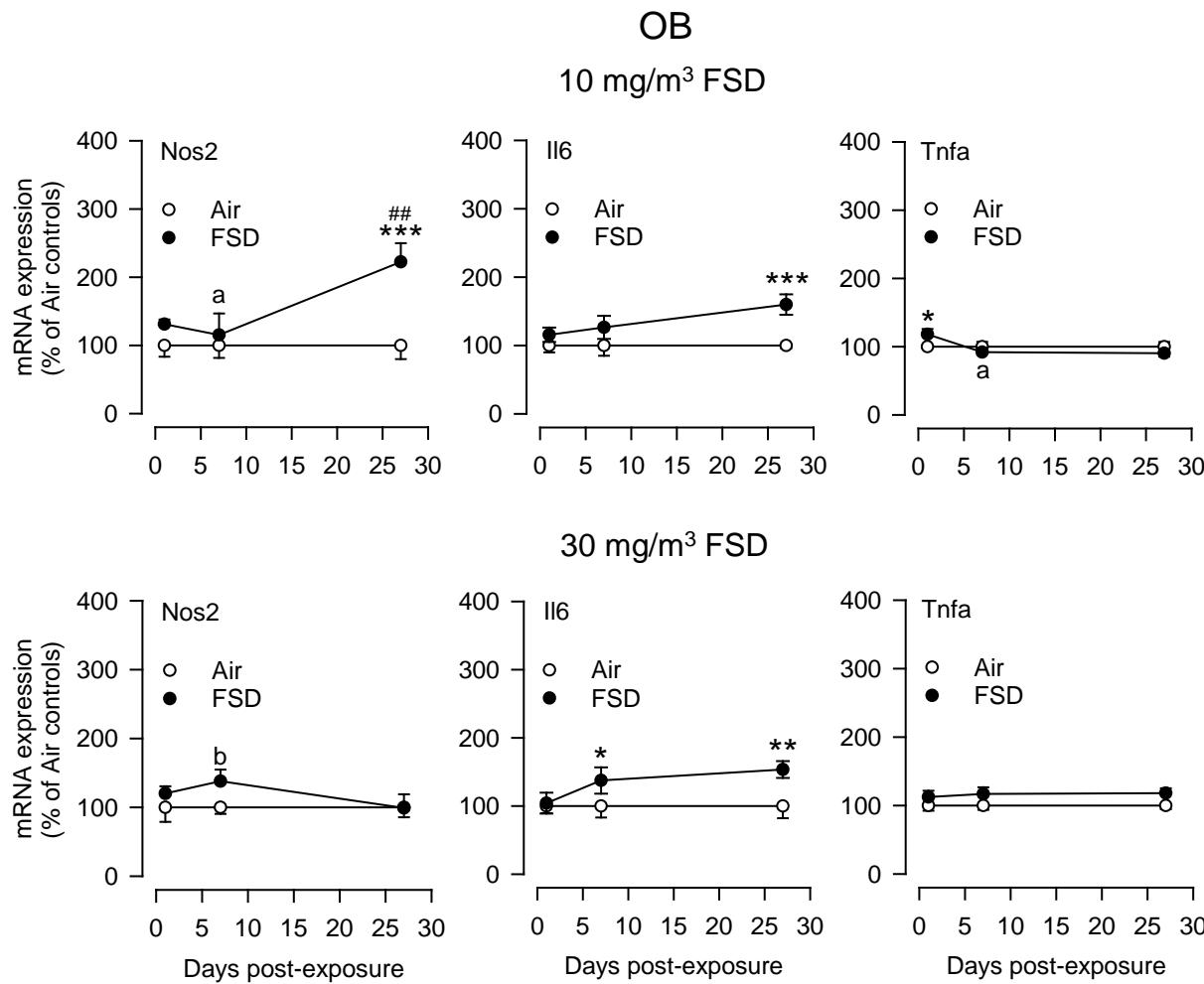


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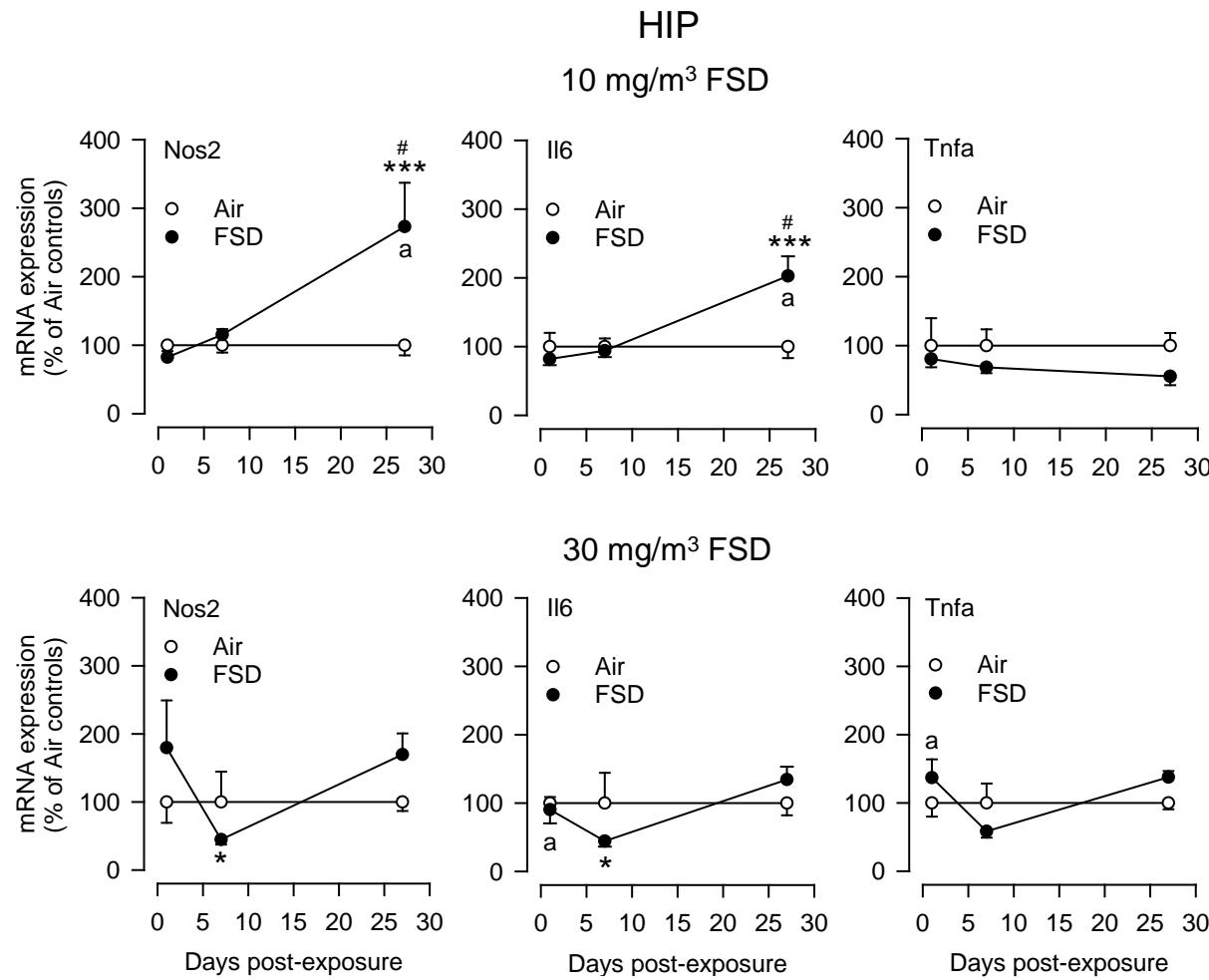


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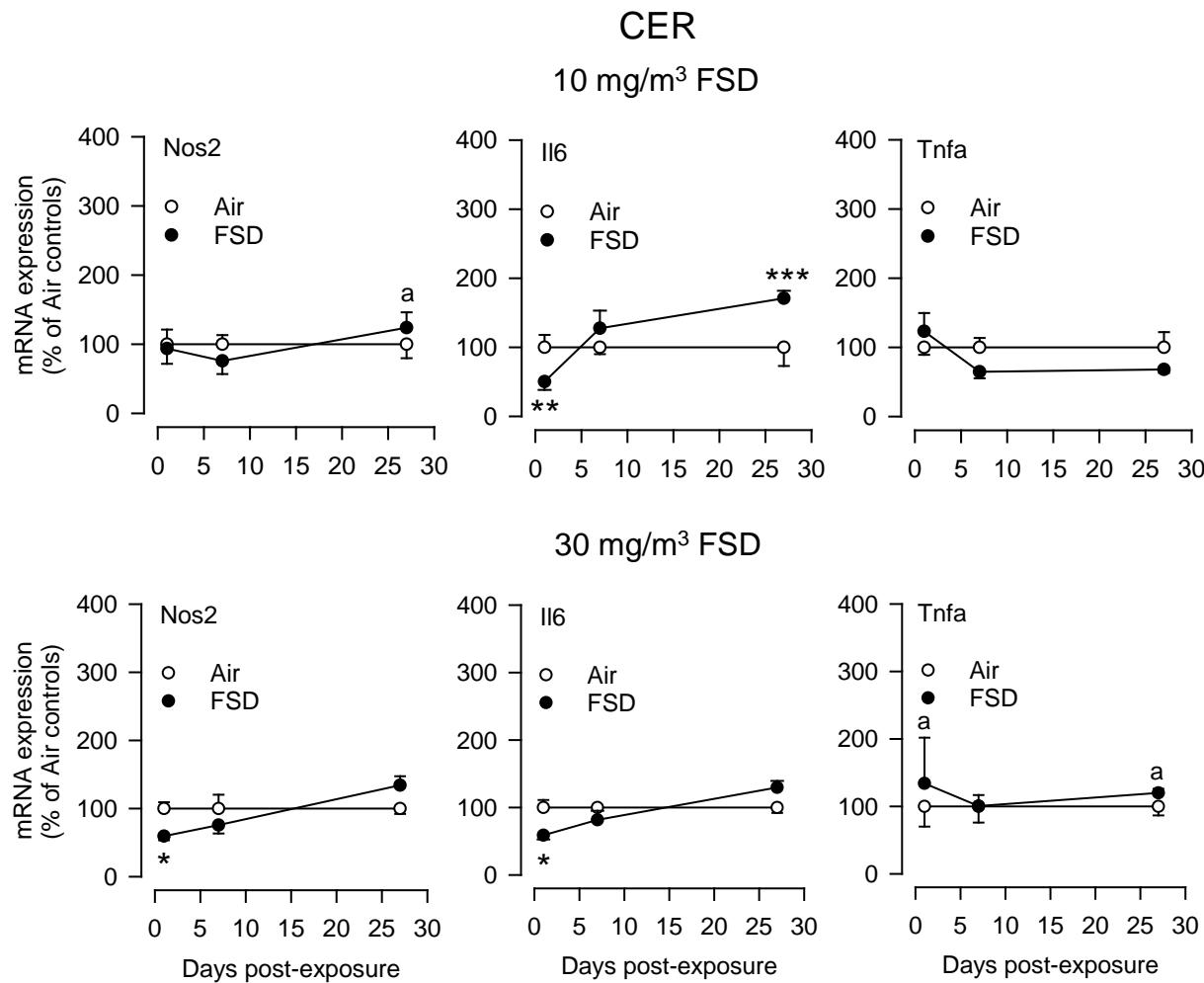


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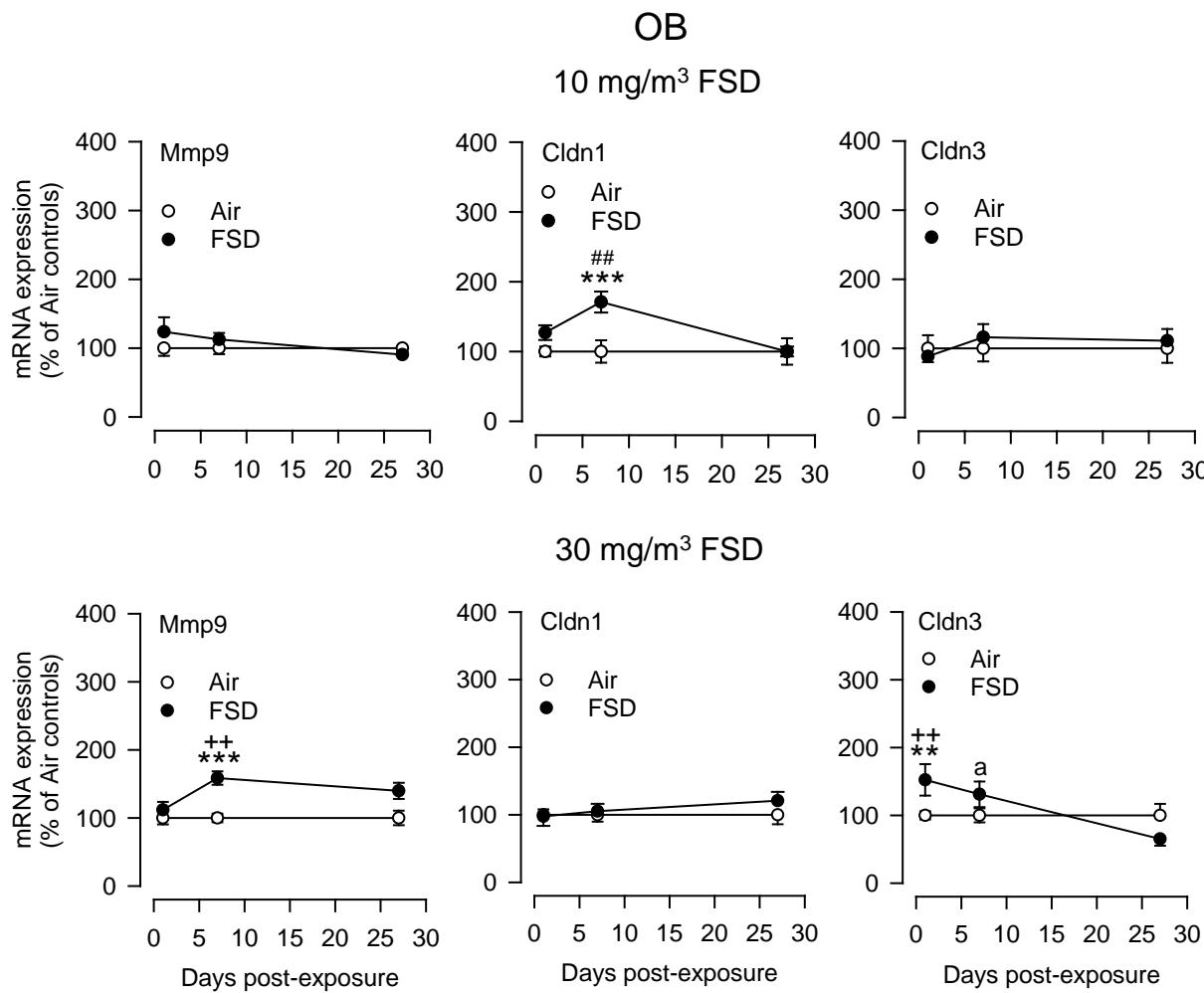


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Sriram et al.

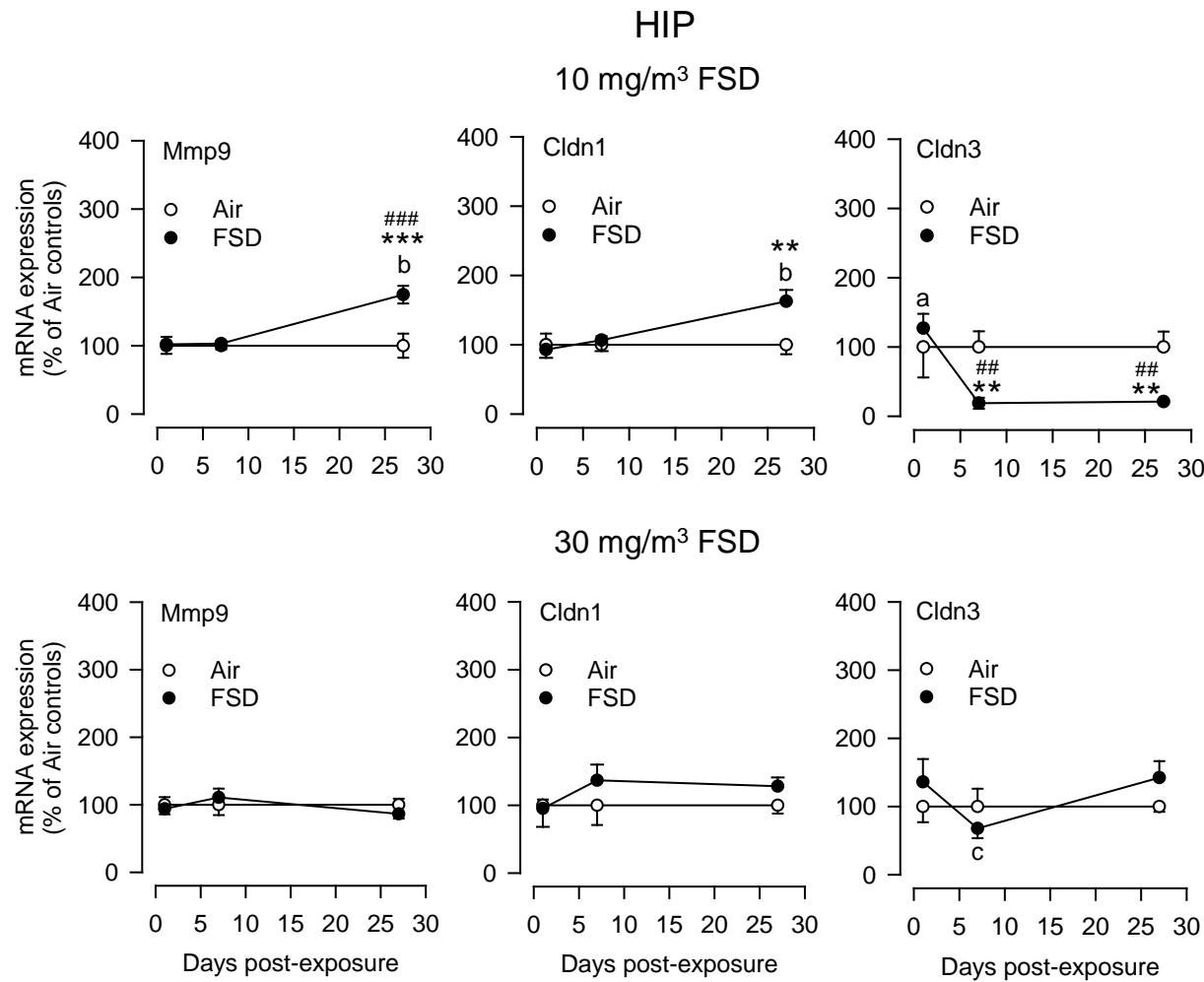


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Sriram et al.

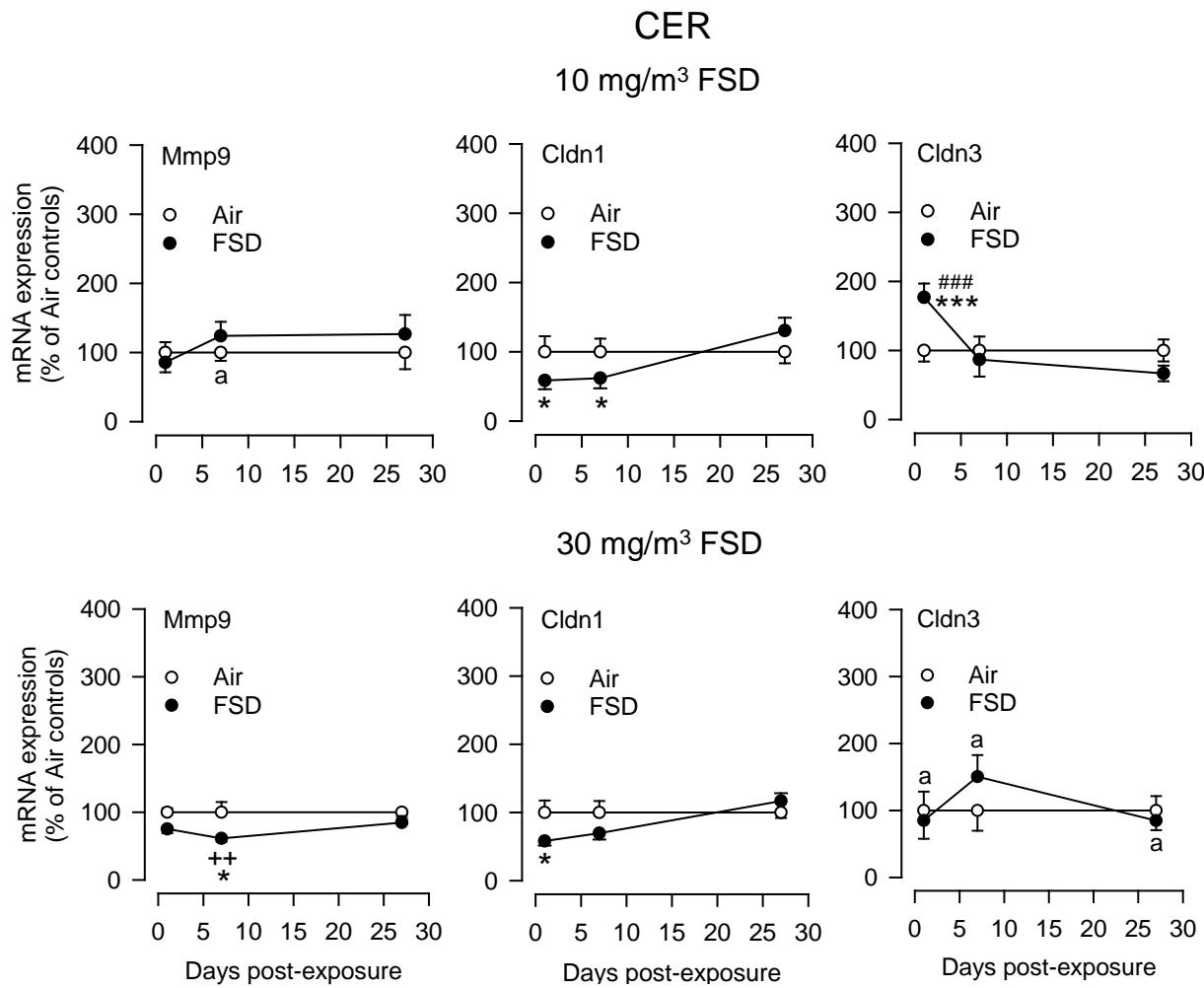


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Sriram et al.

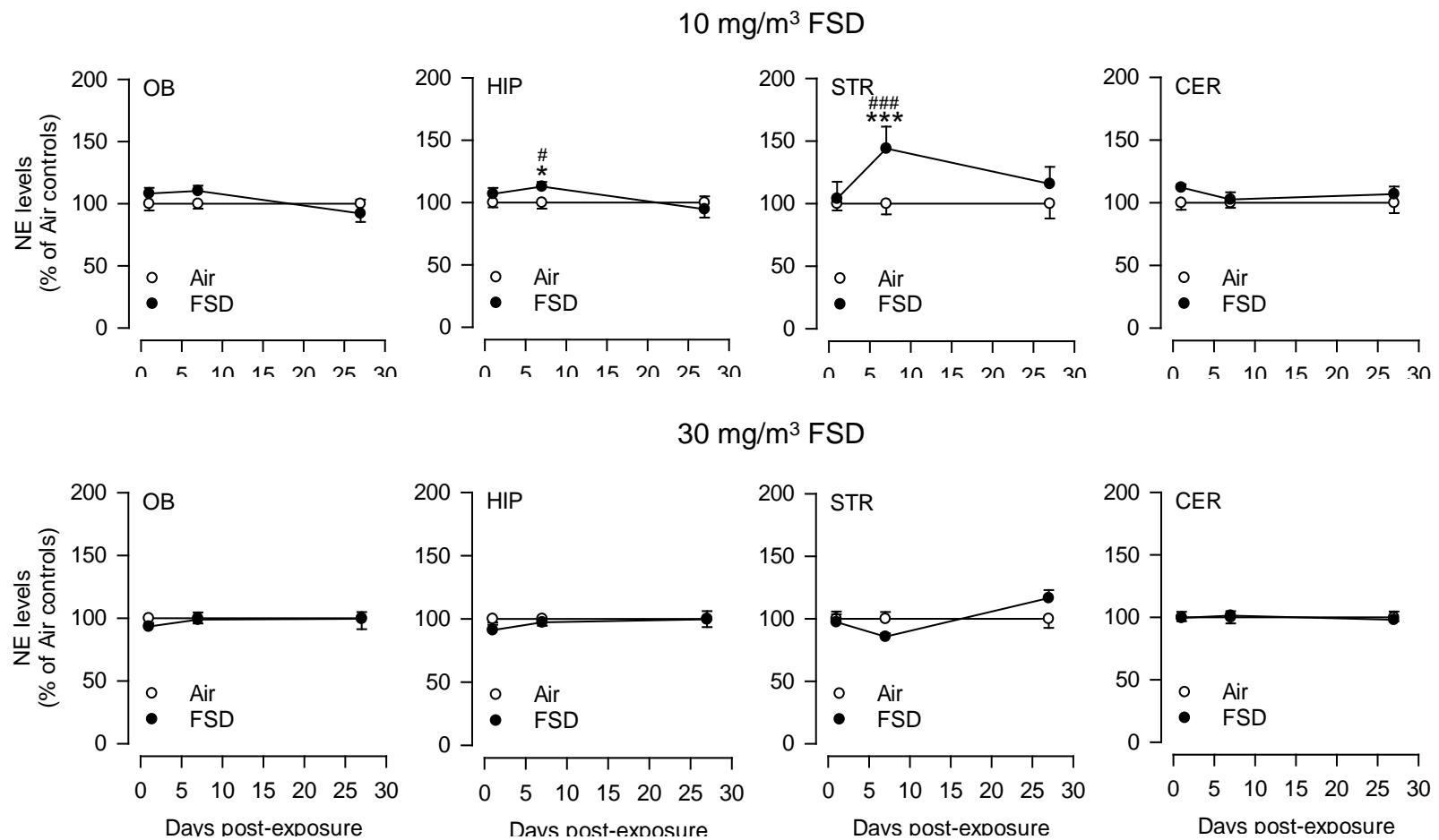


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Sriram et al.

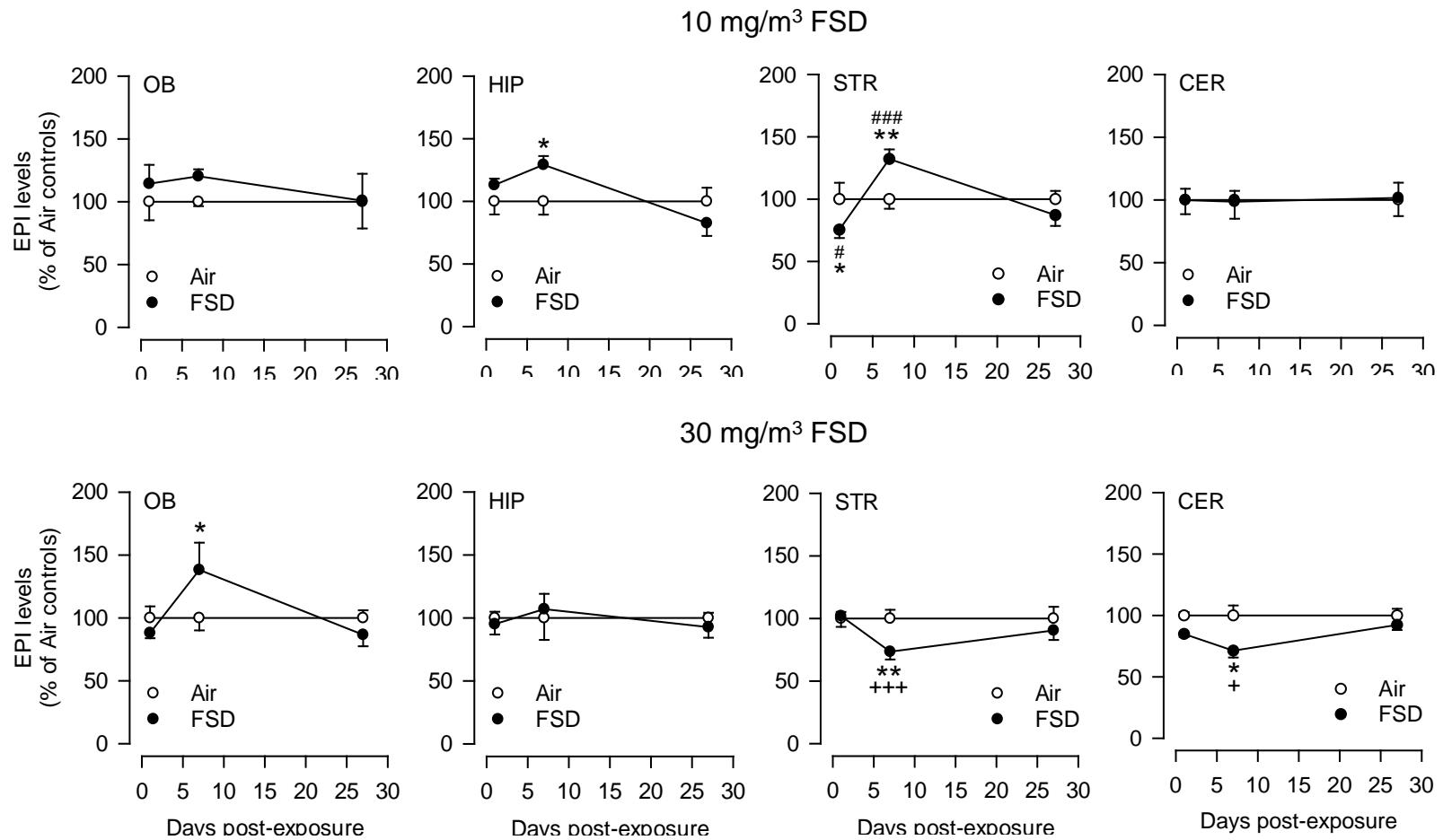


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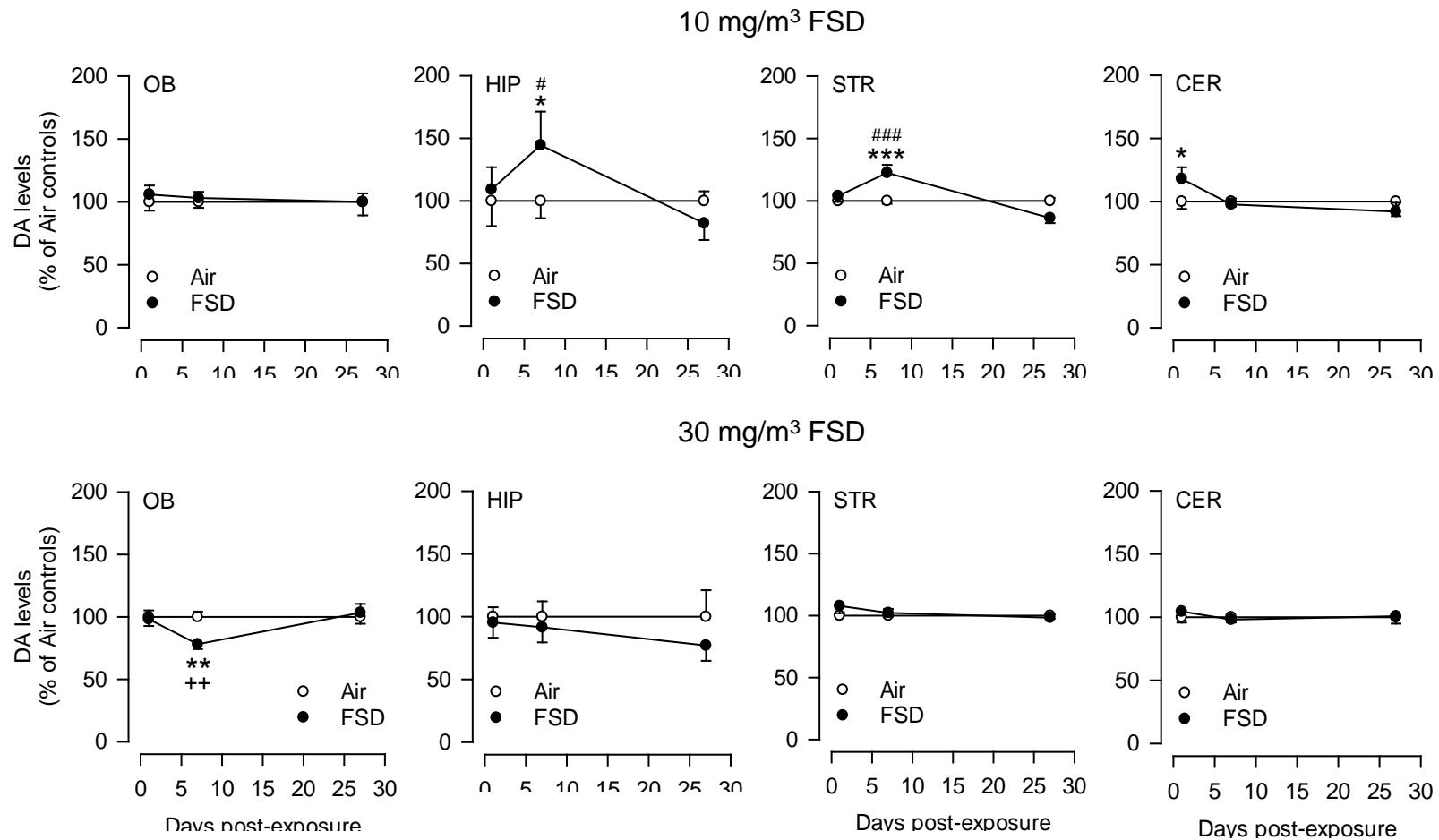


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Sriram et al.

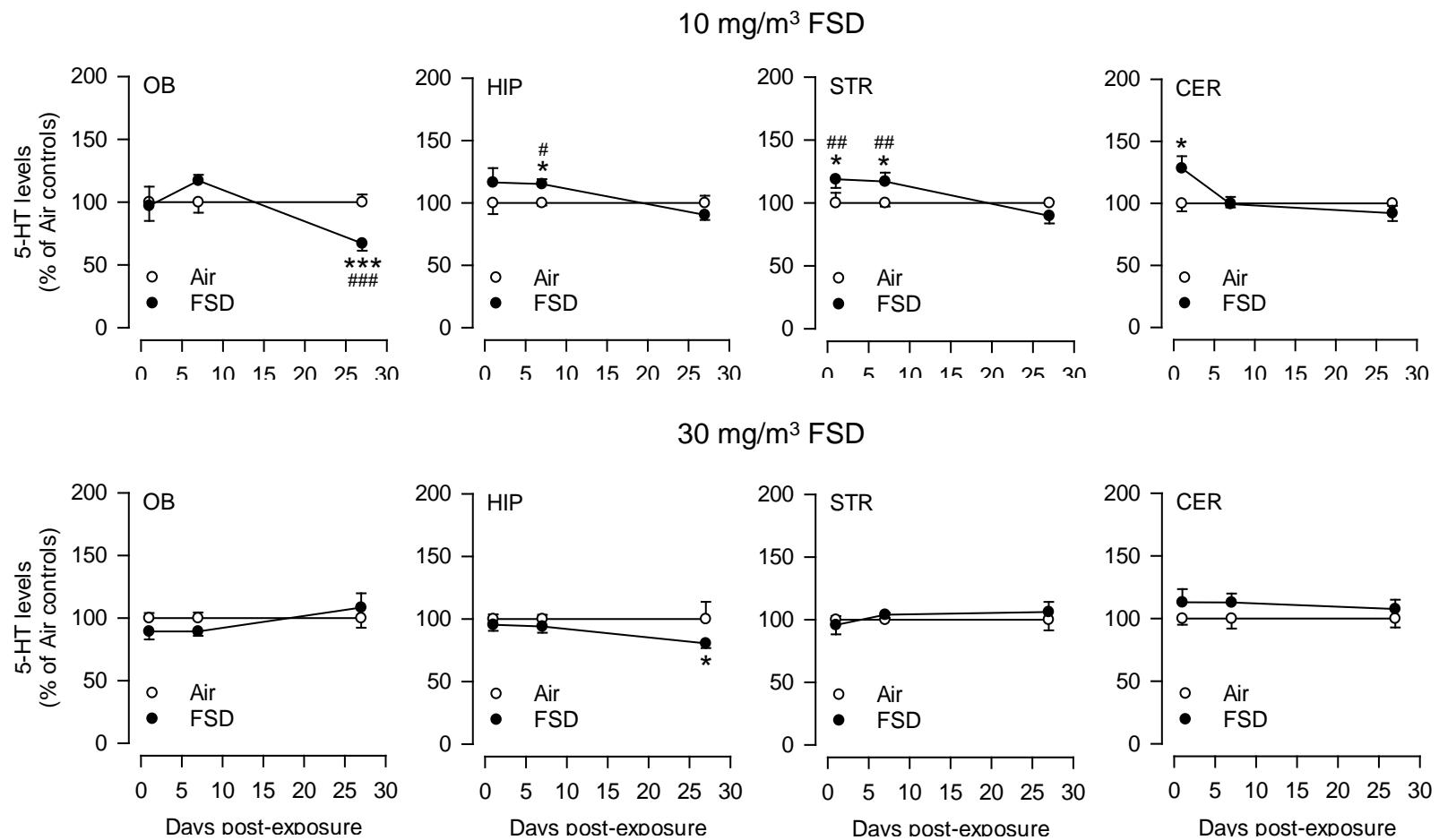


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Sriram et al.

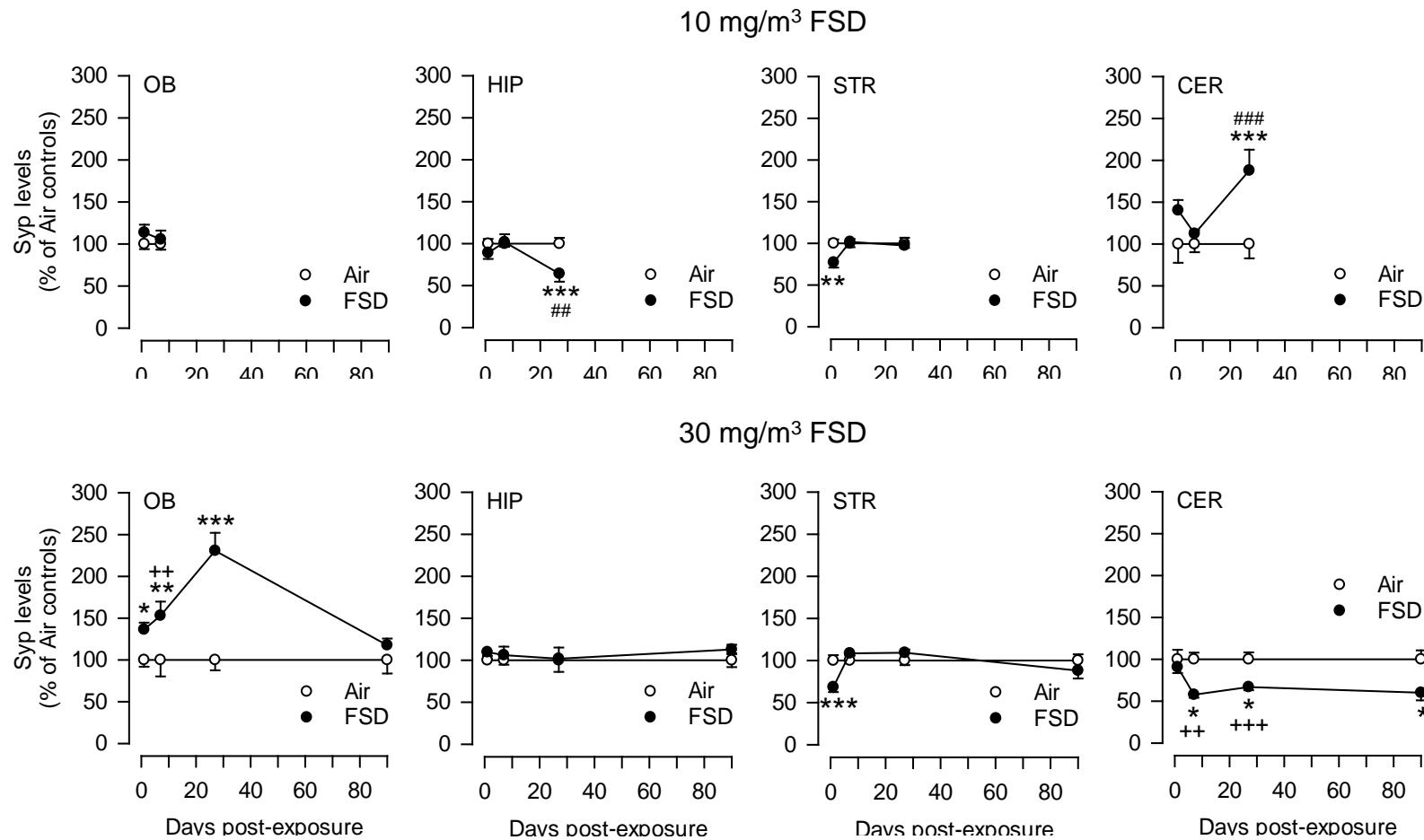


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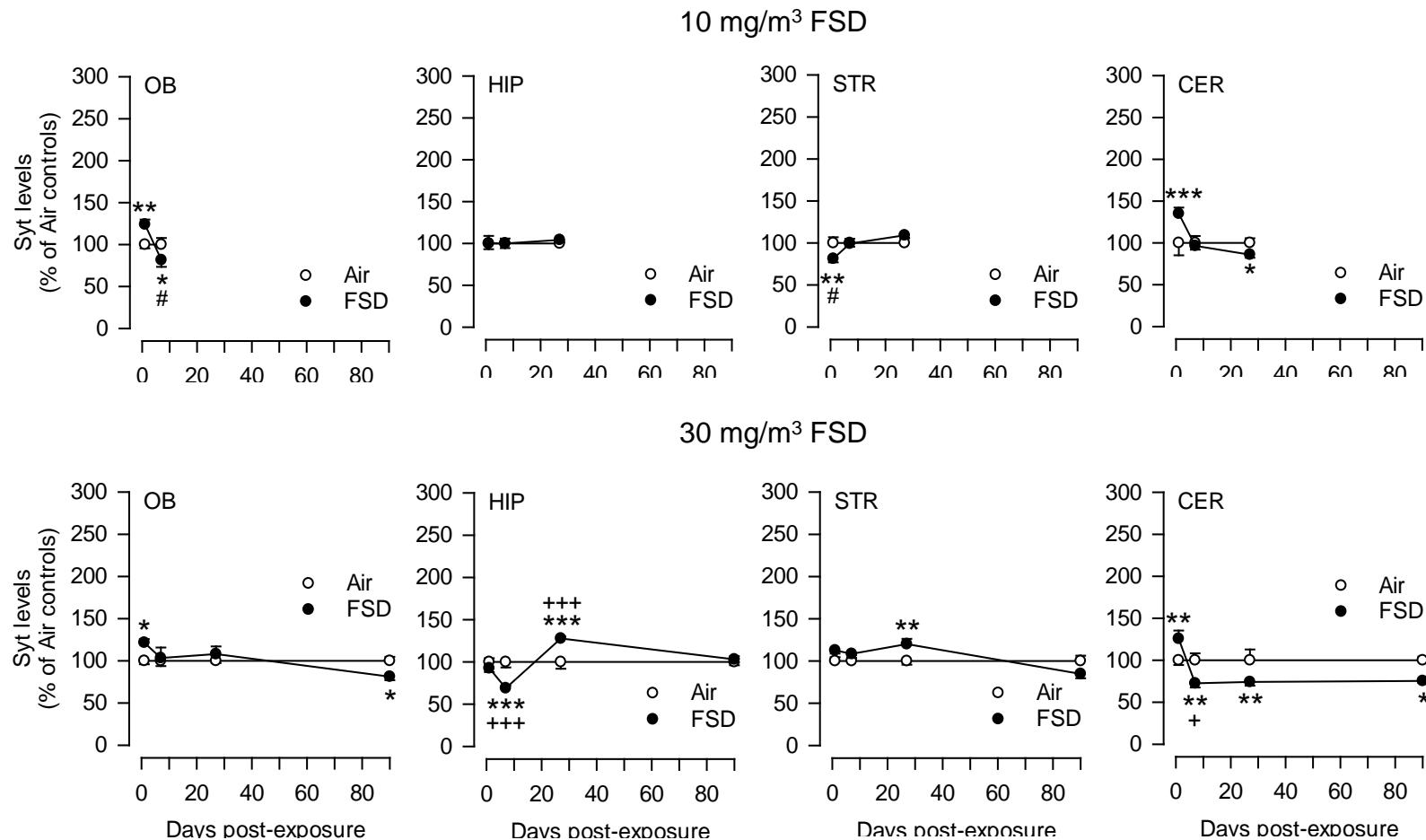


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Sriram et al.

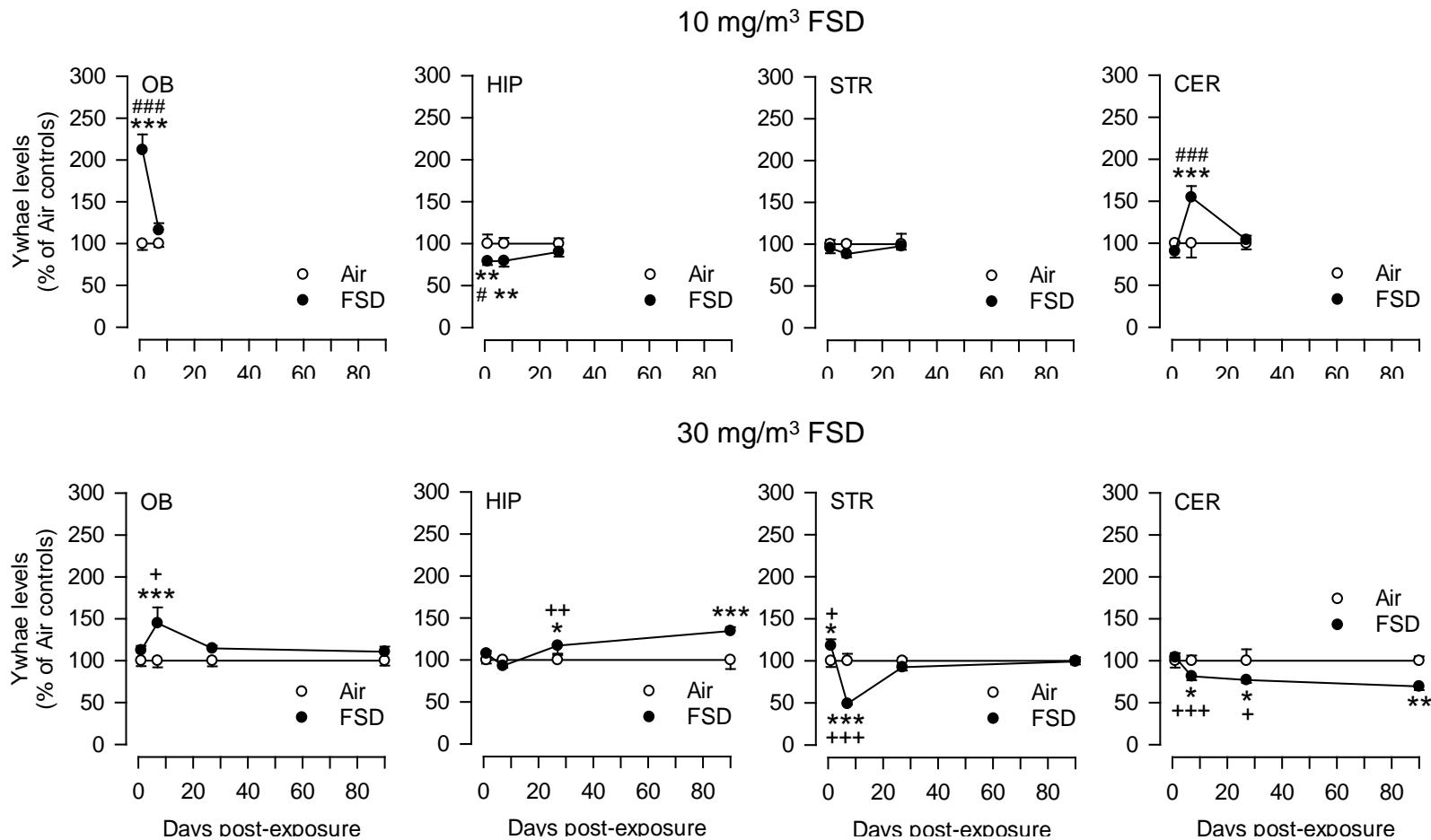


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Sriram et al.

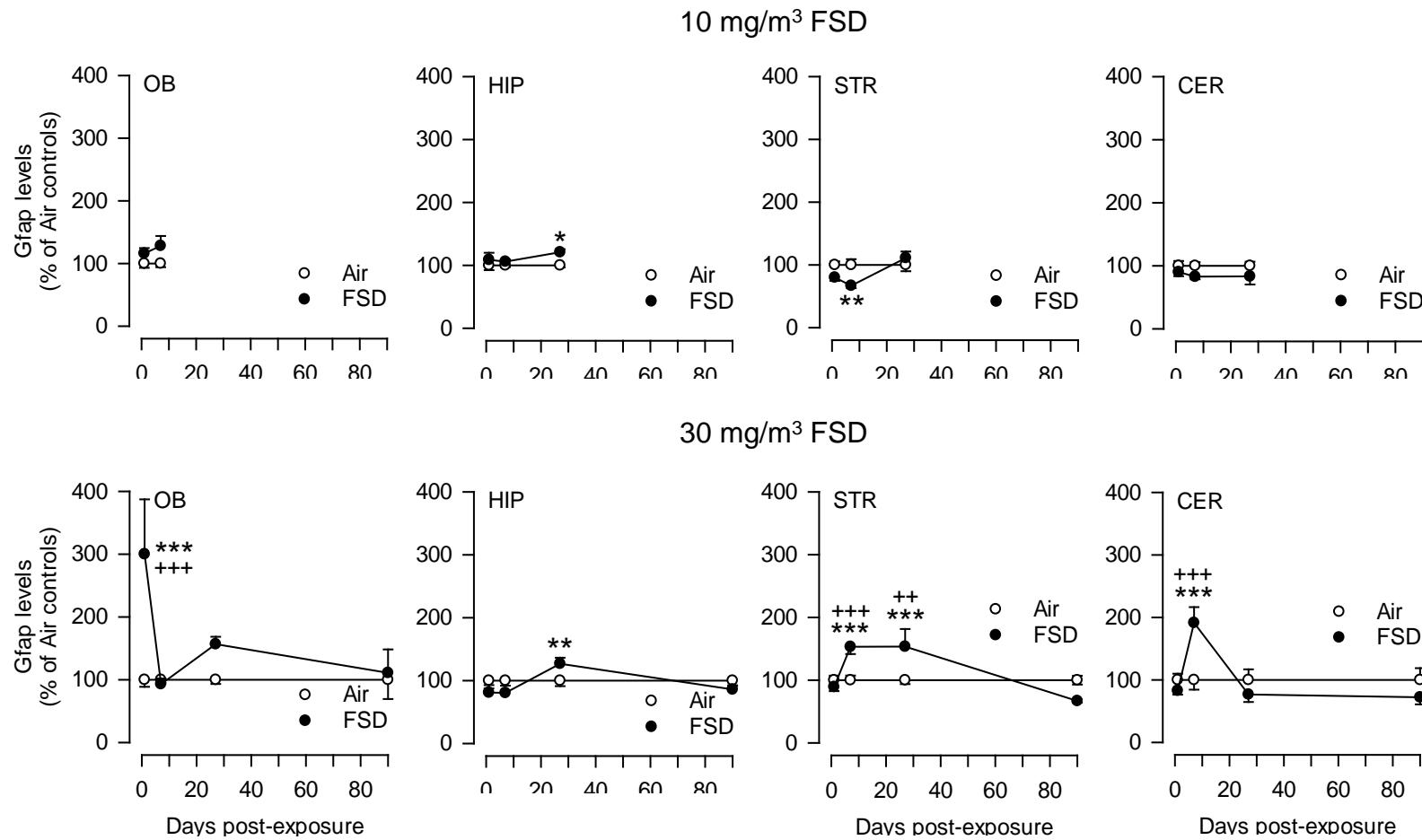


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Sriram et al.

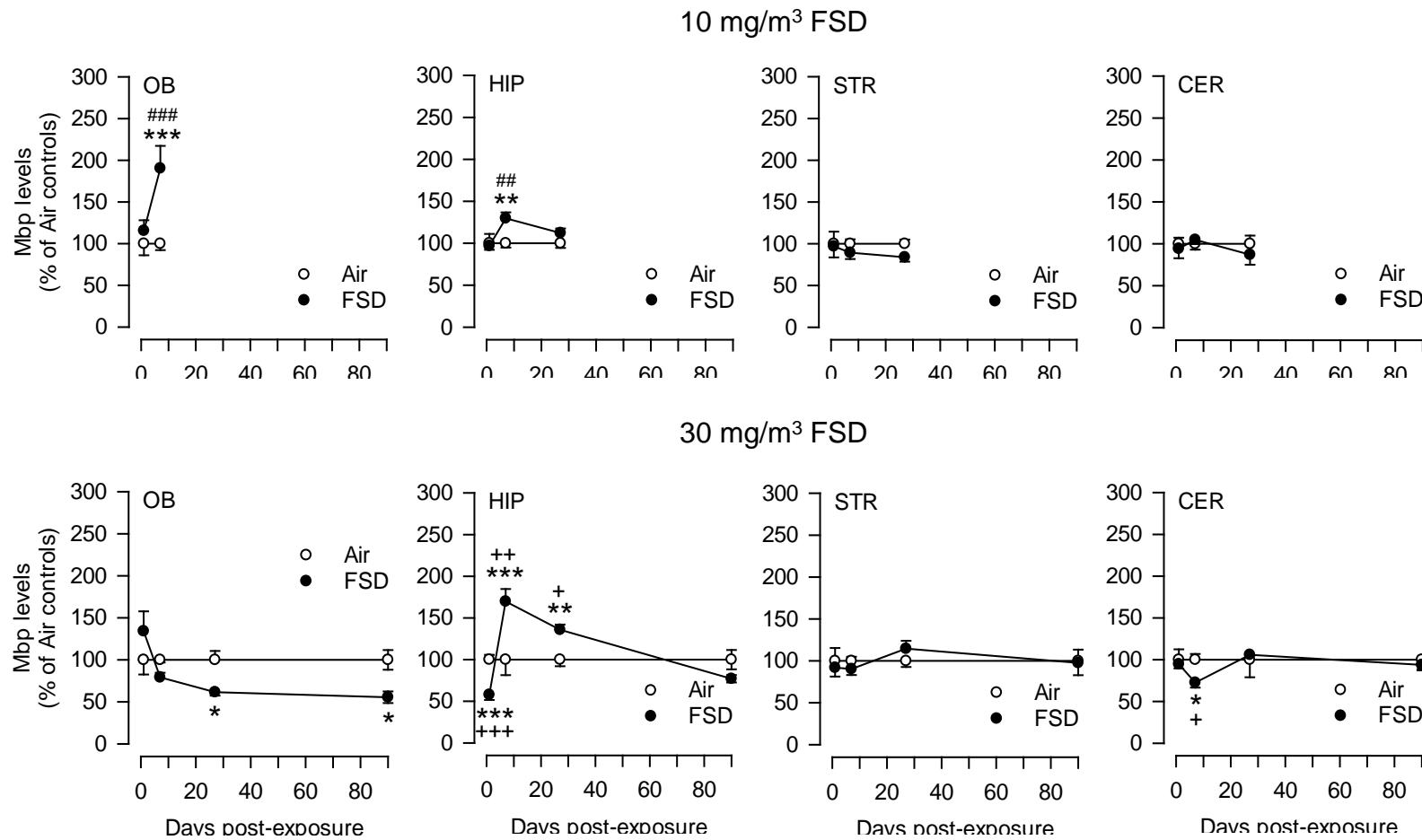


Fig. S1 A
Sriram et al

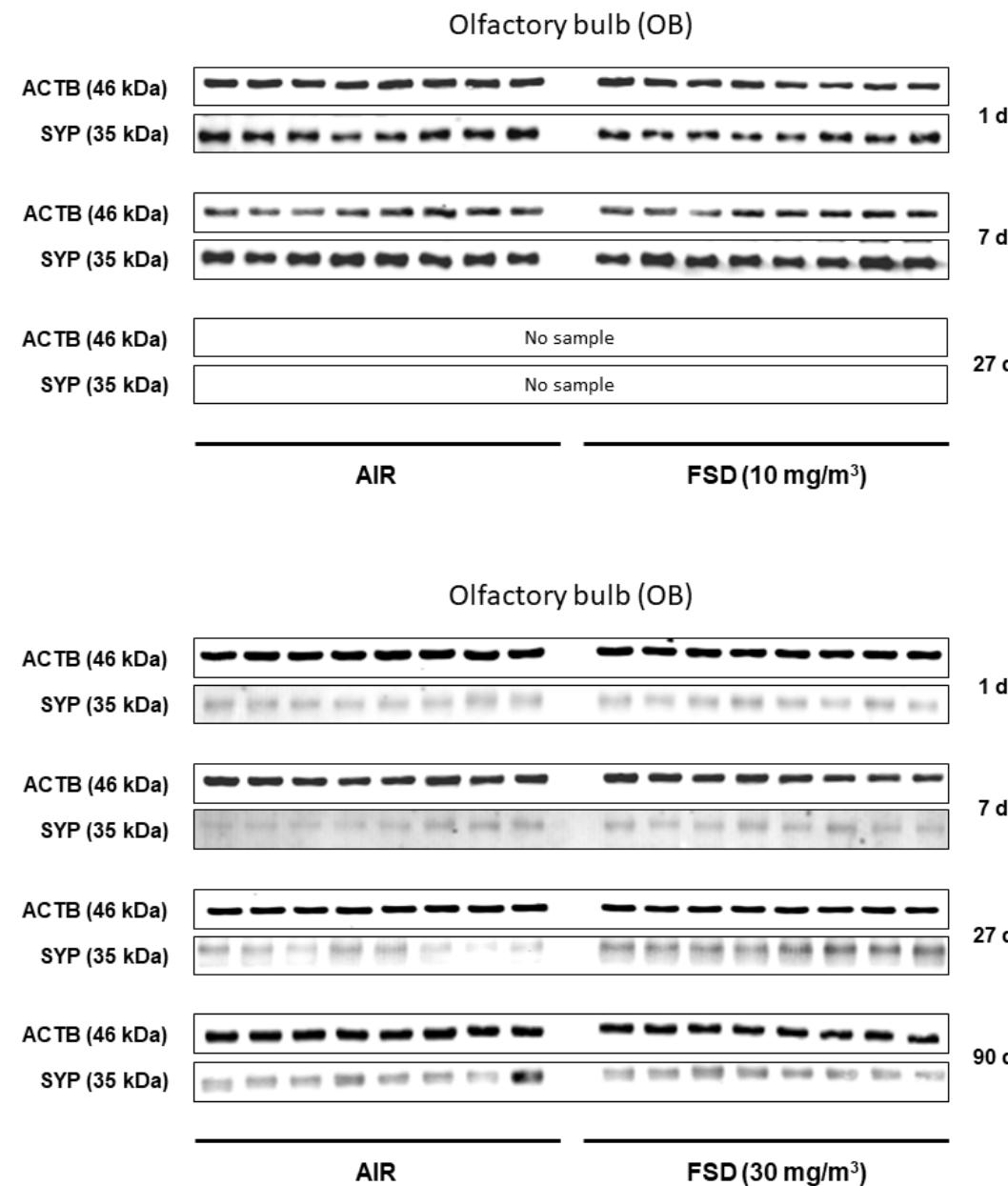


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Sriram et al

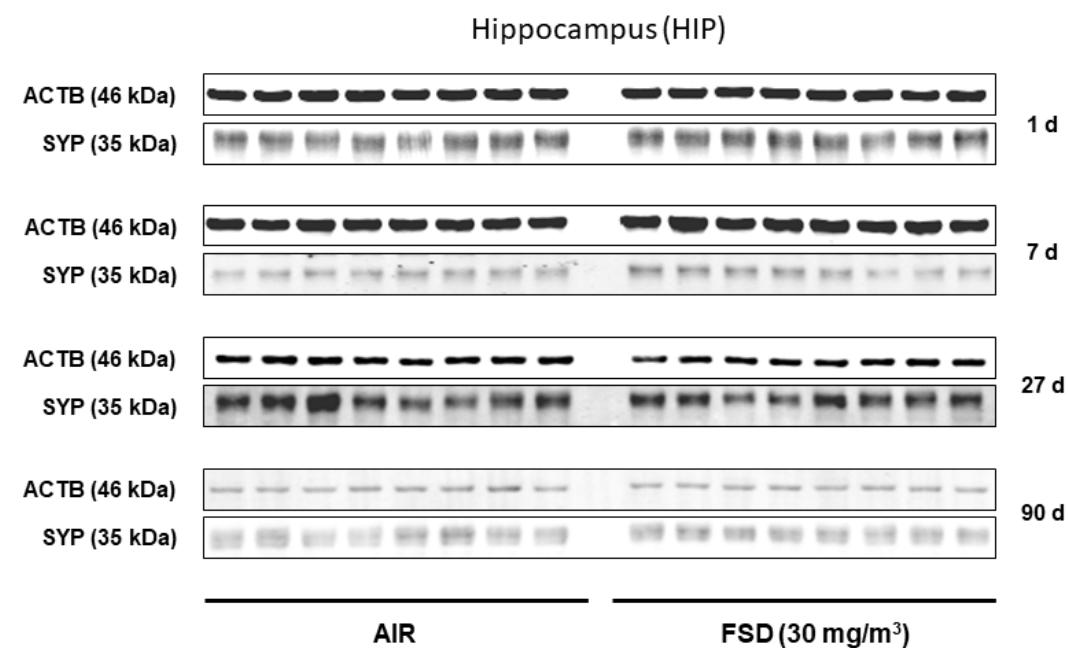
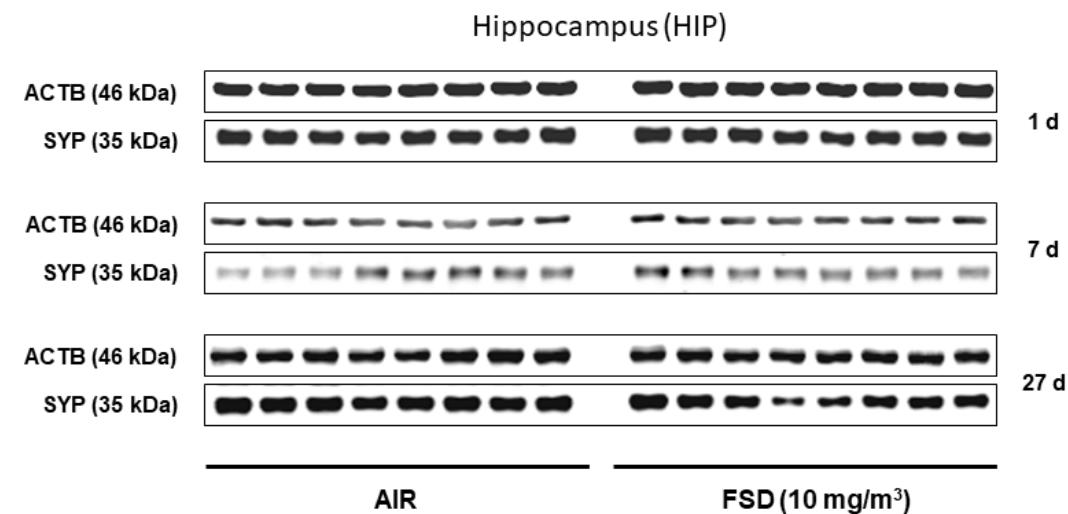


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Sriram et al

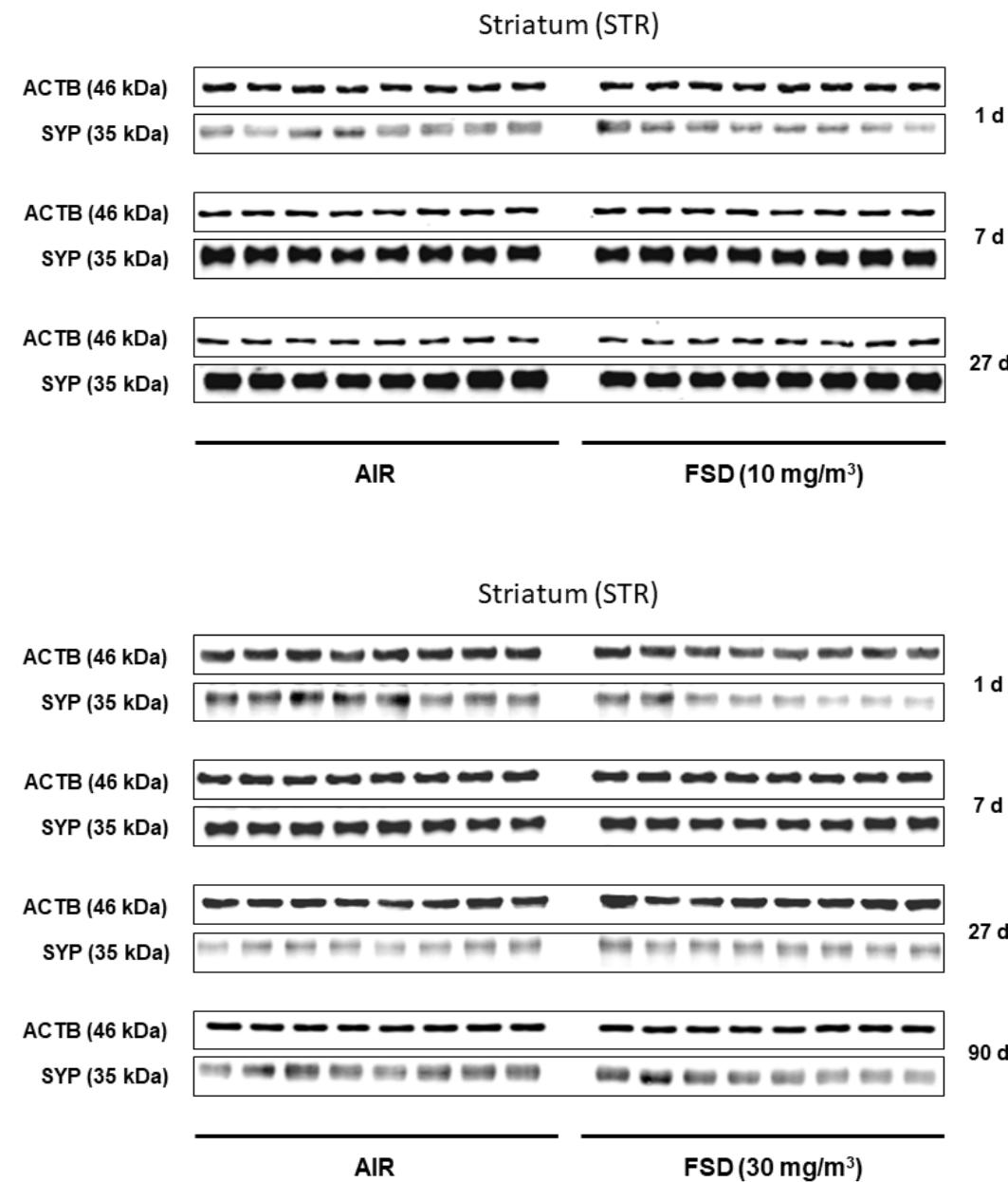


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Sriram et al

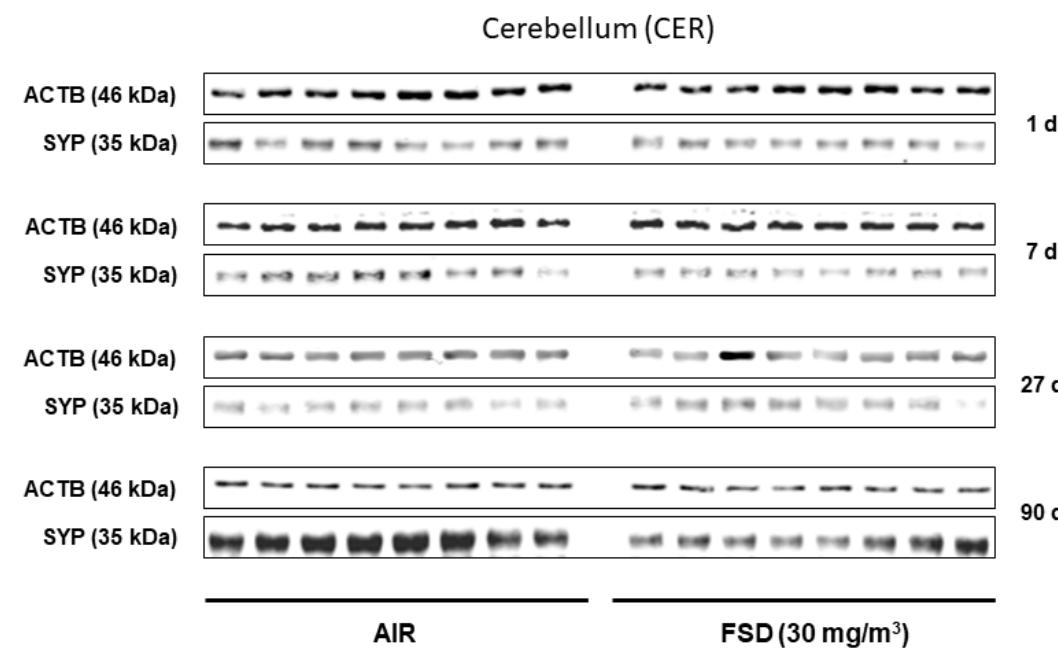
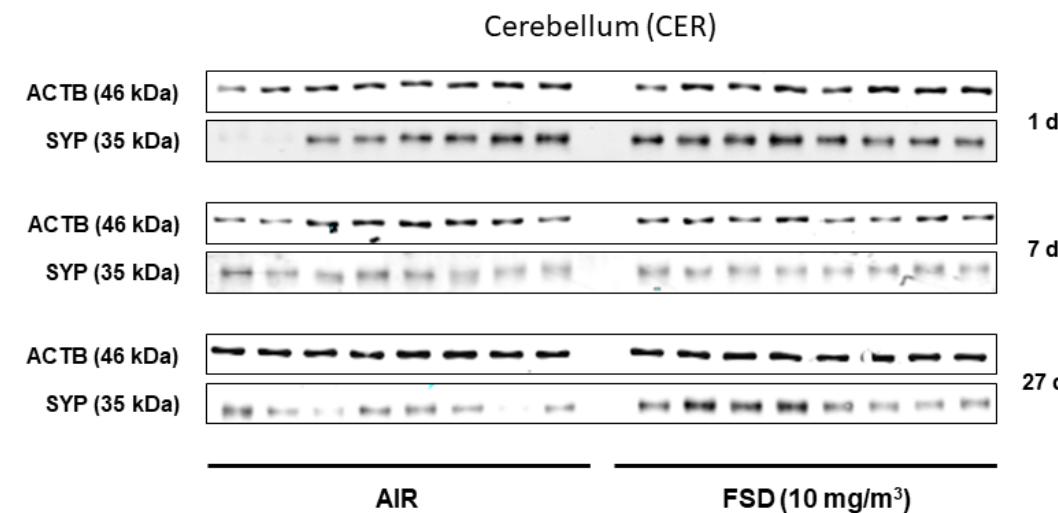


Fig. S2 A Sriram et al

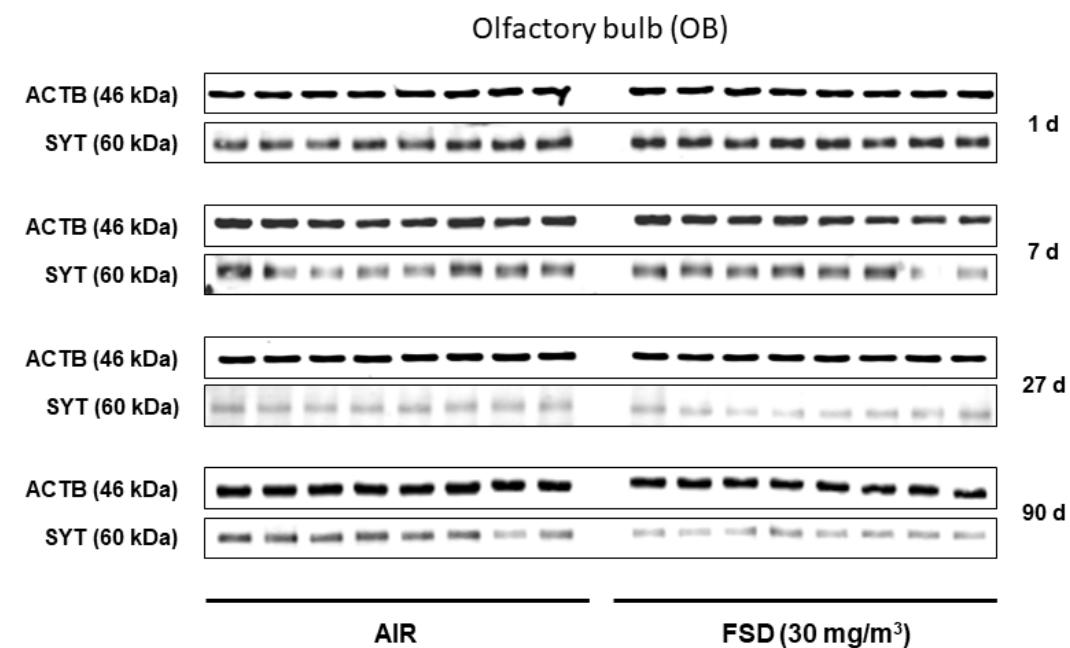
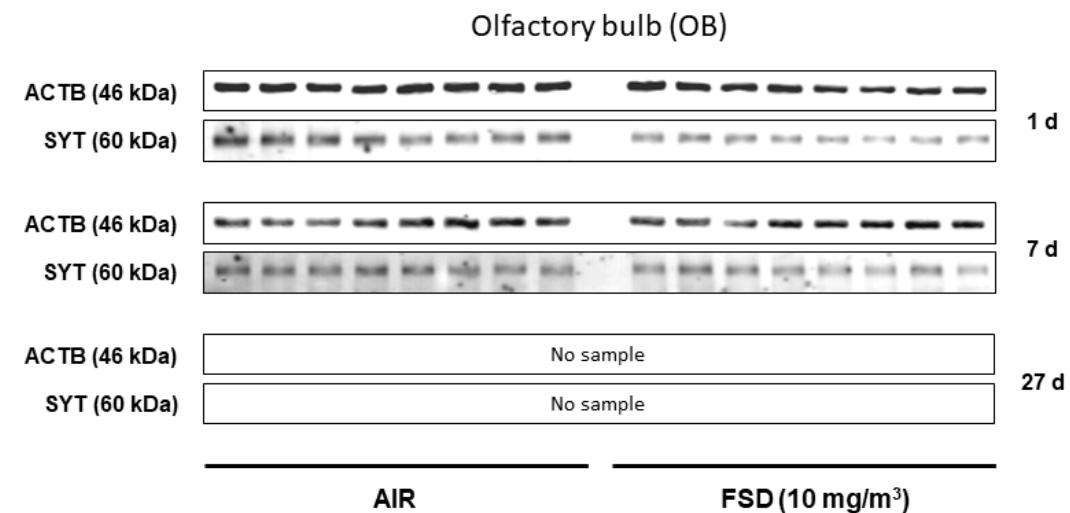


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Sriram et al

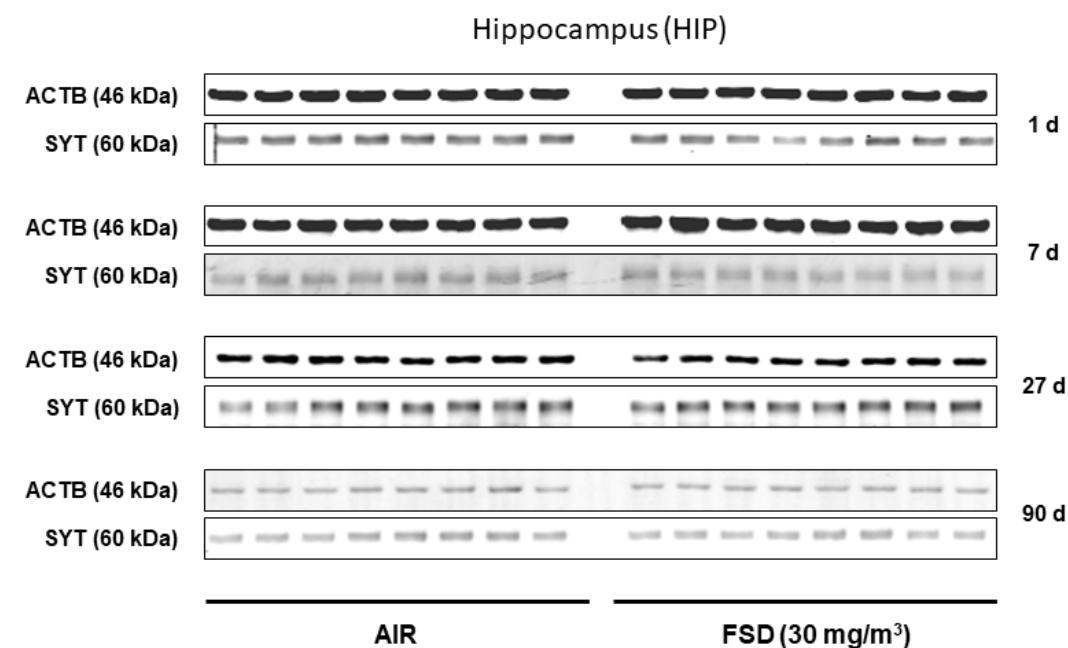
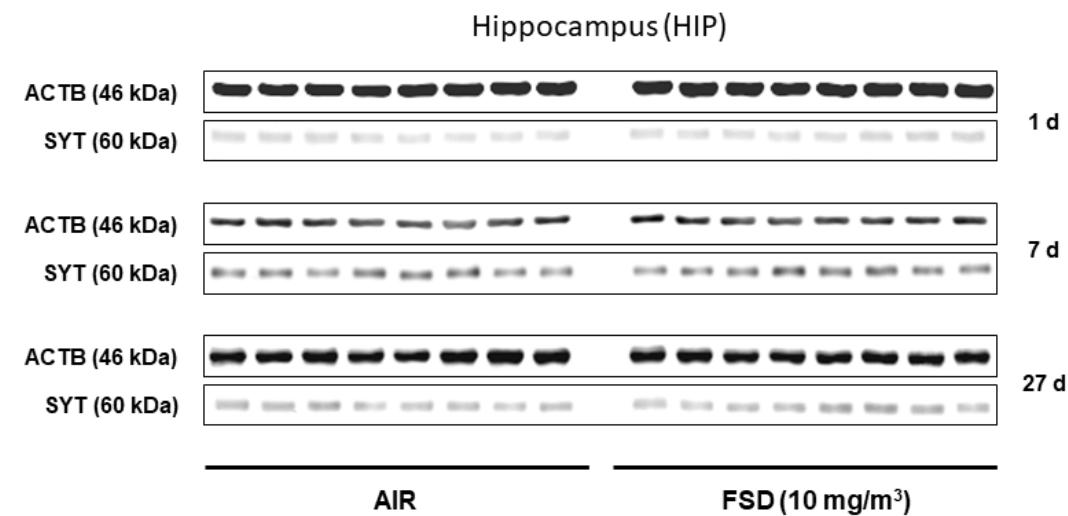


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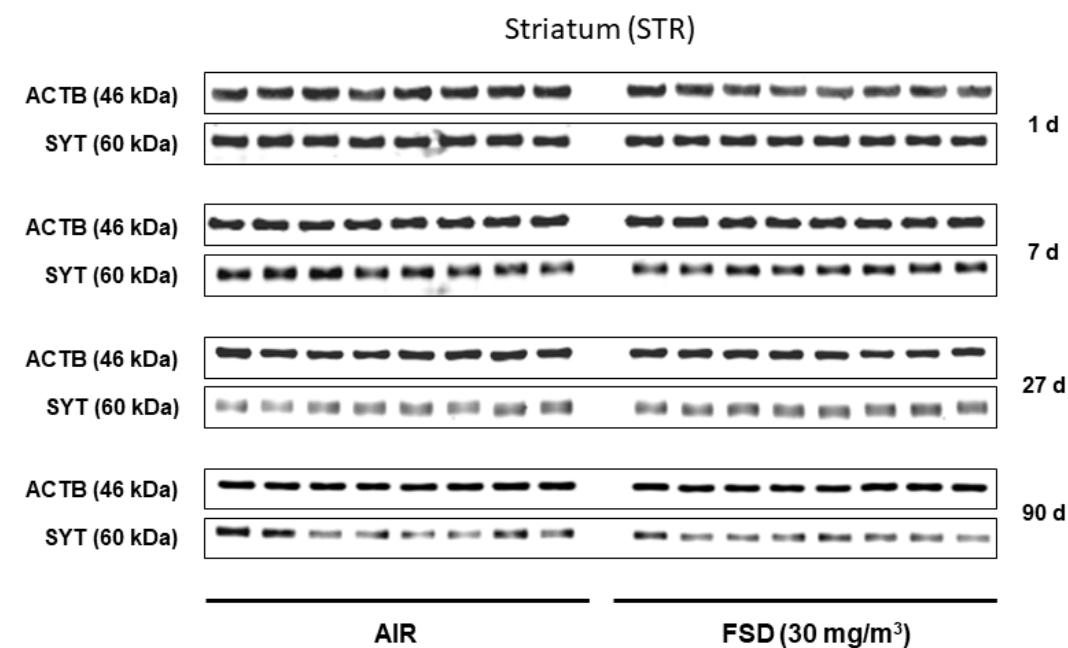
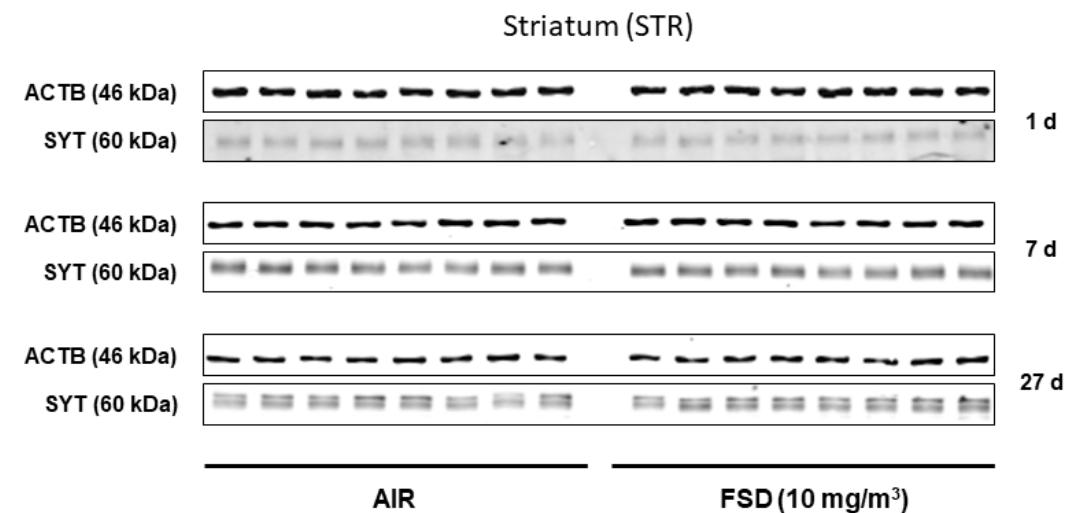


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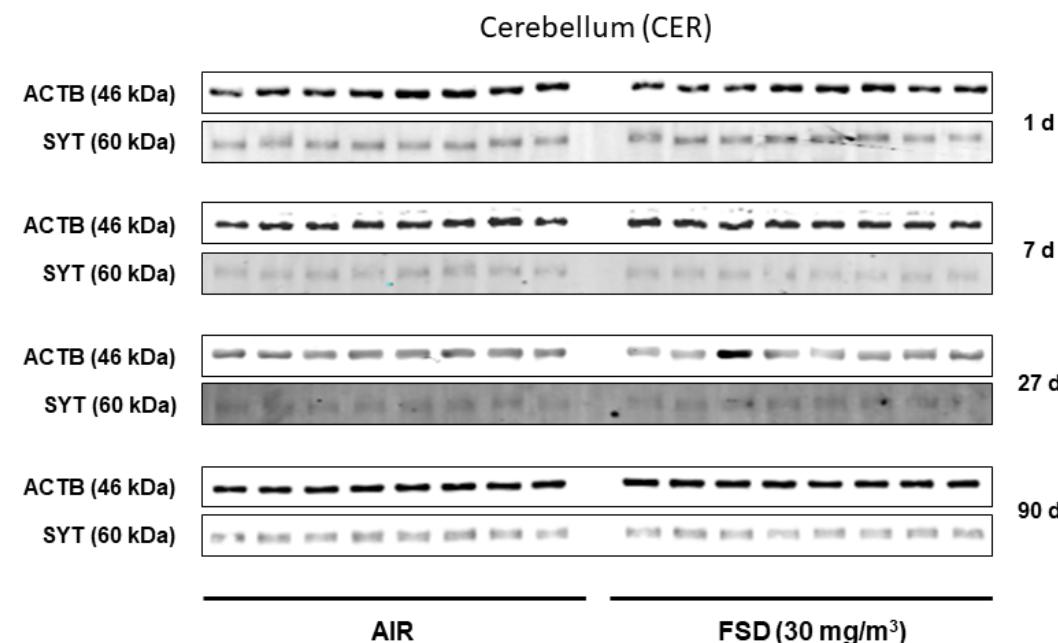
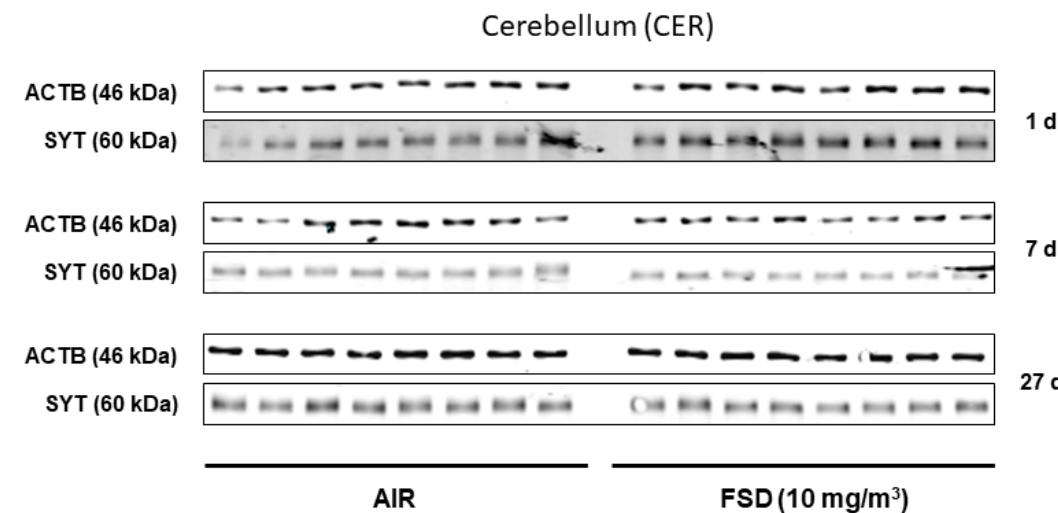


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Sriram et al

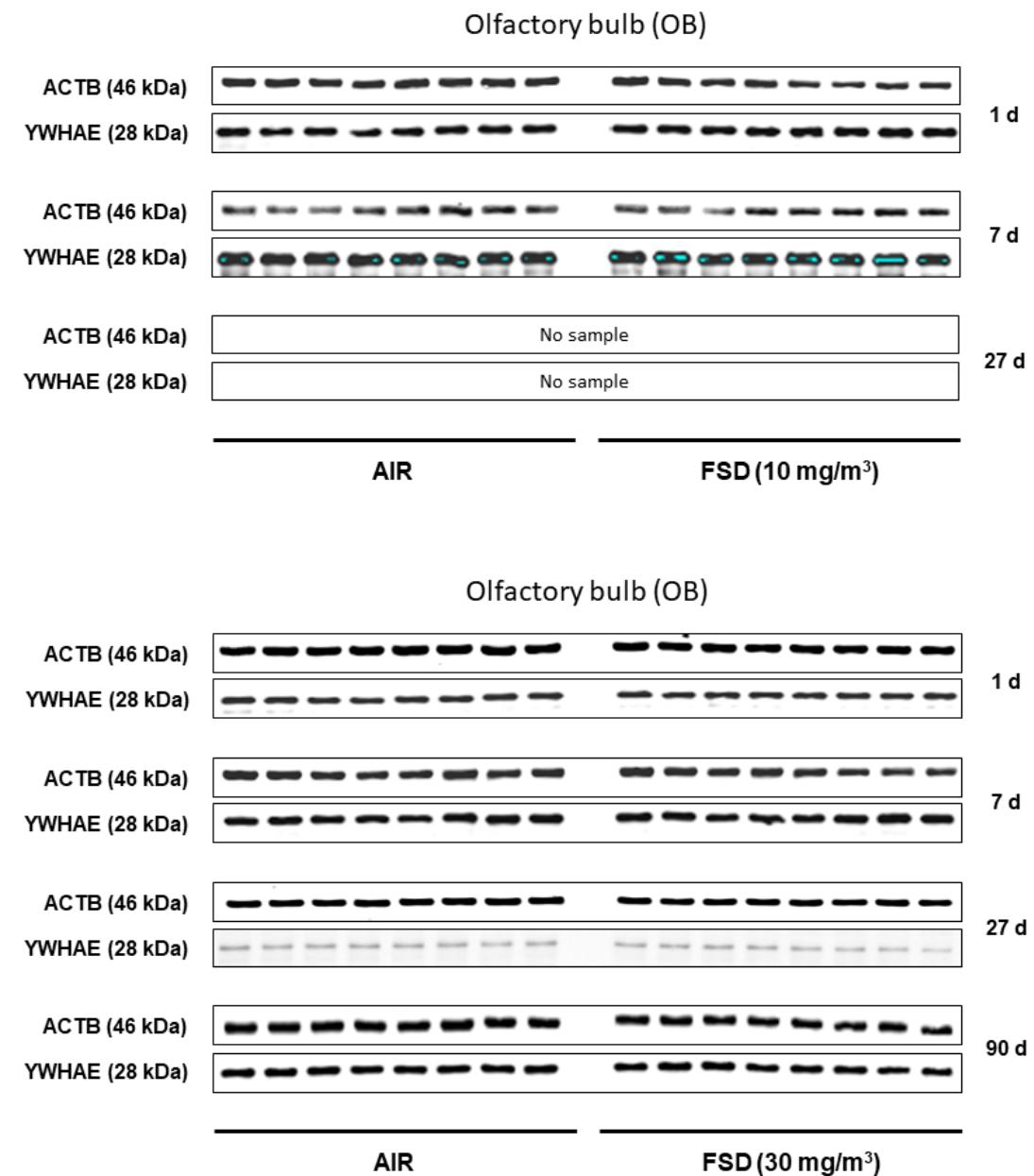


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Sriram et al

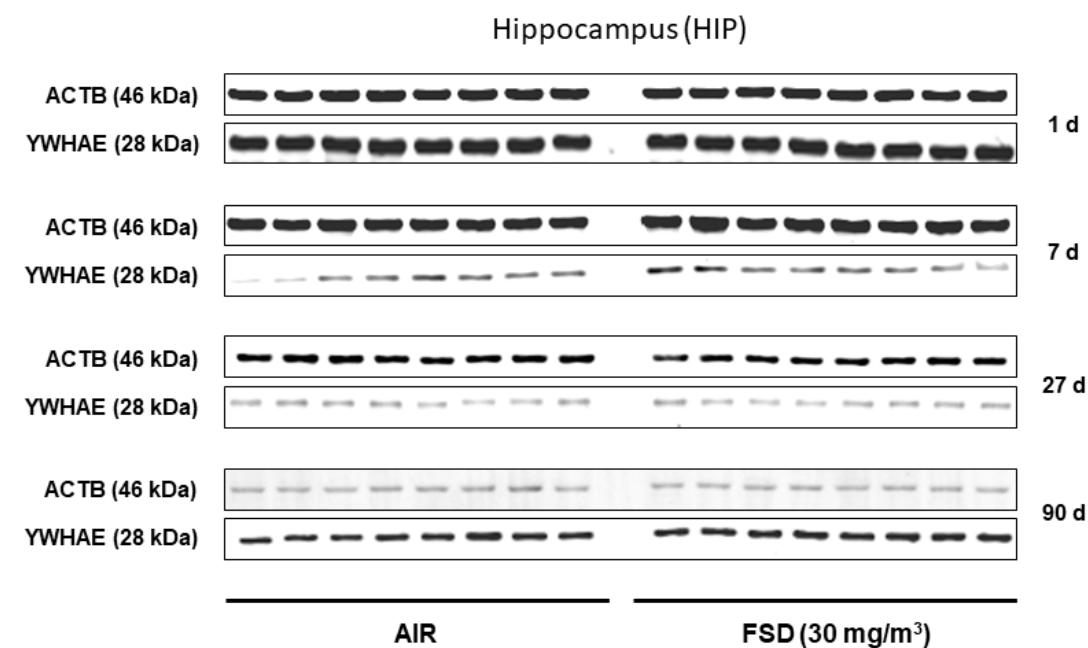
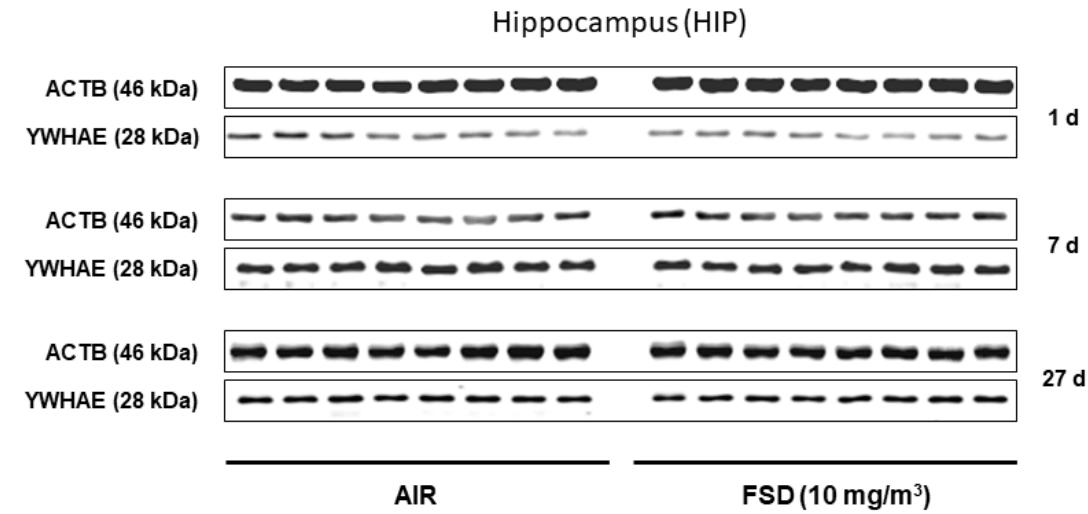


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Sriram et al

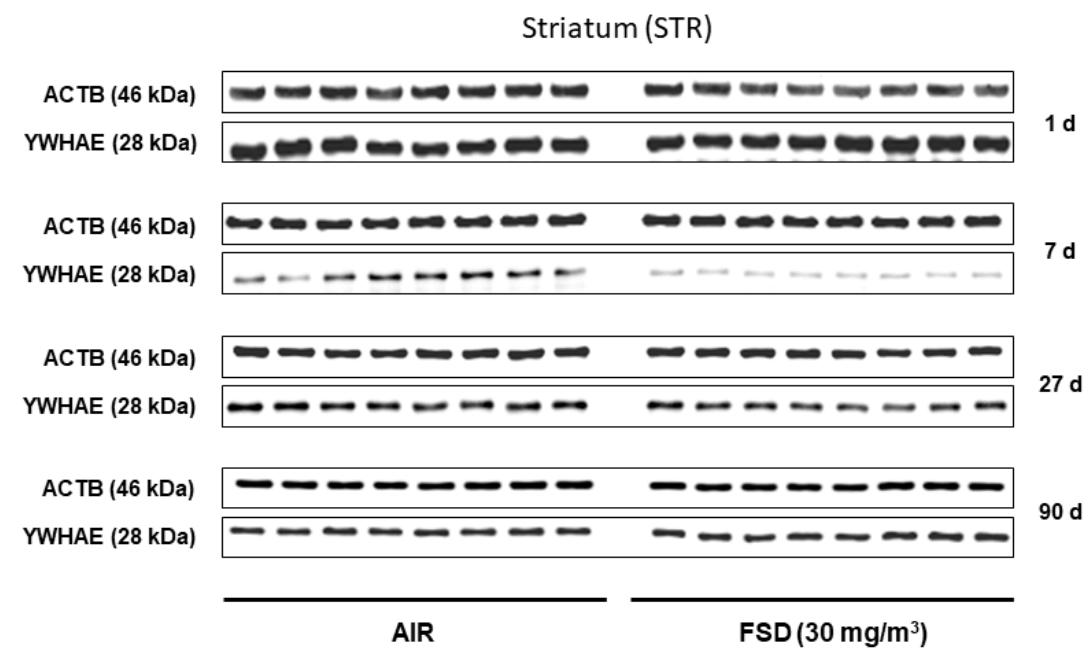
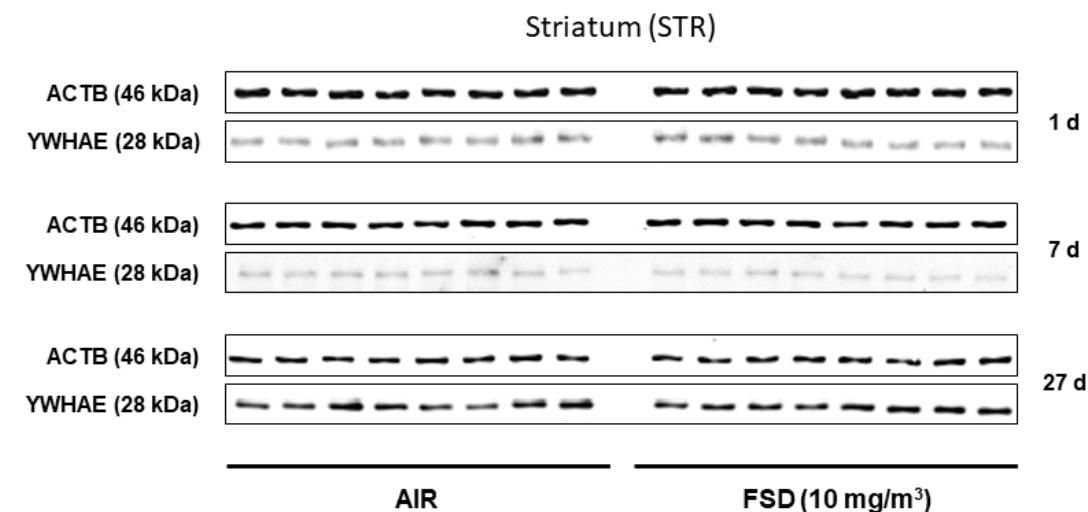


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Sriram et al

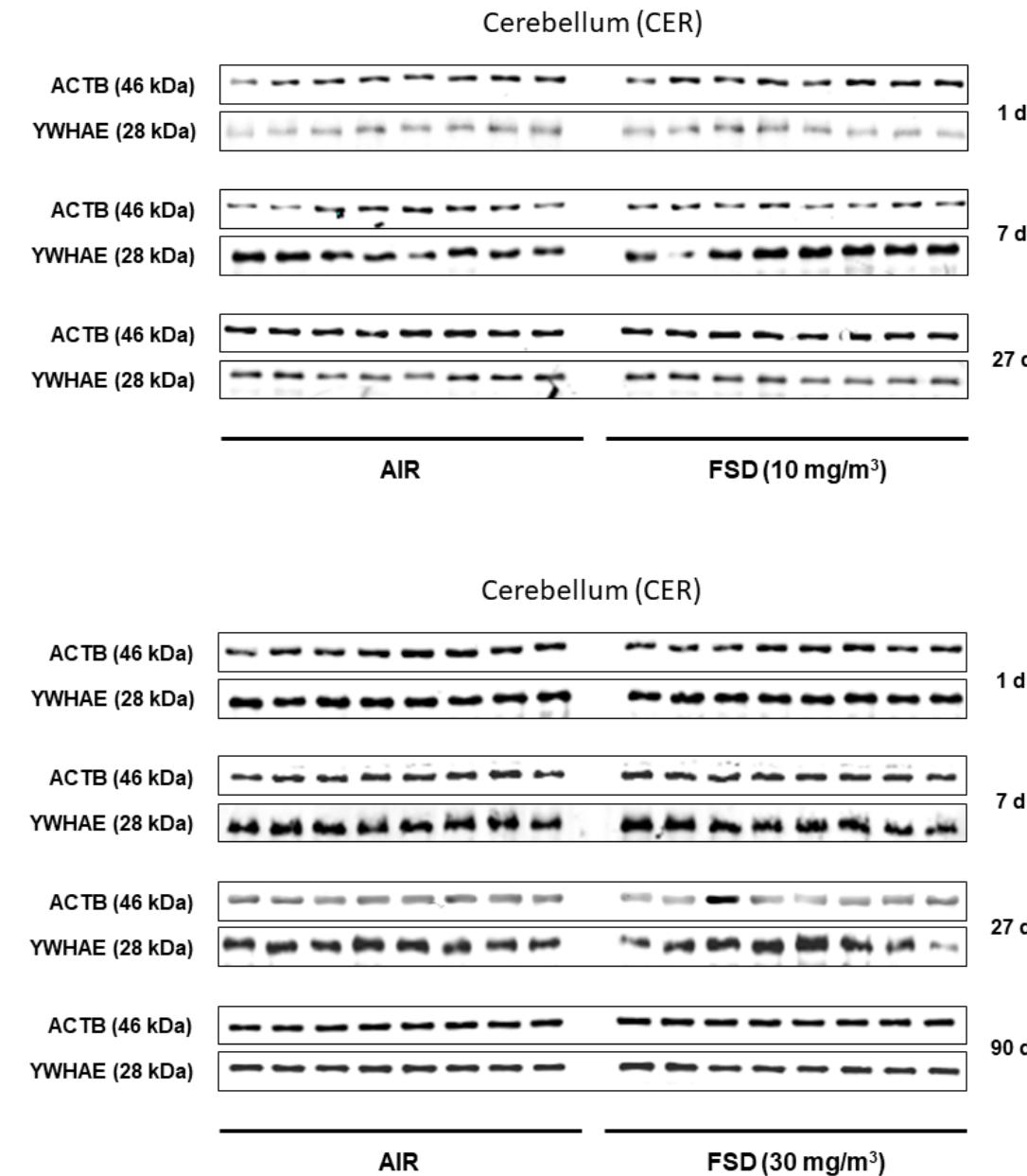


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Sriram et al

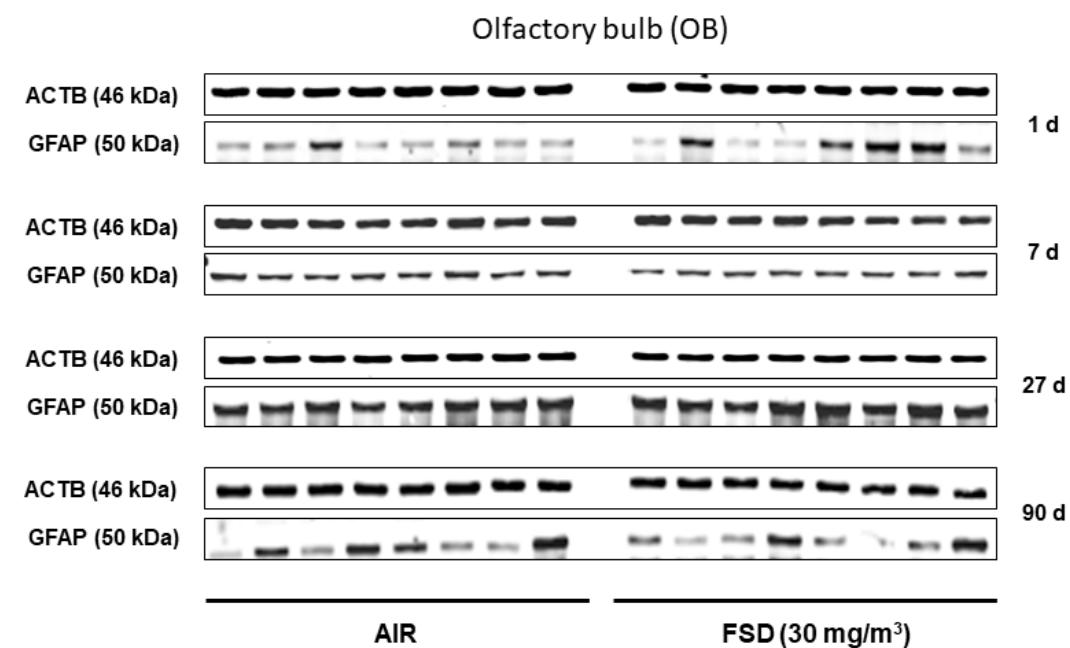
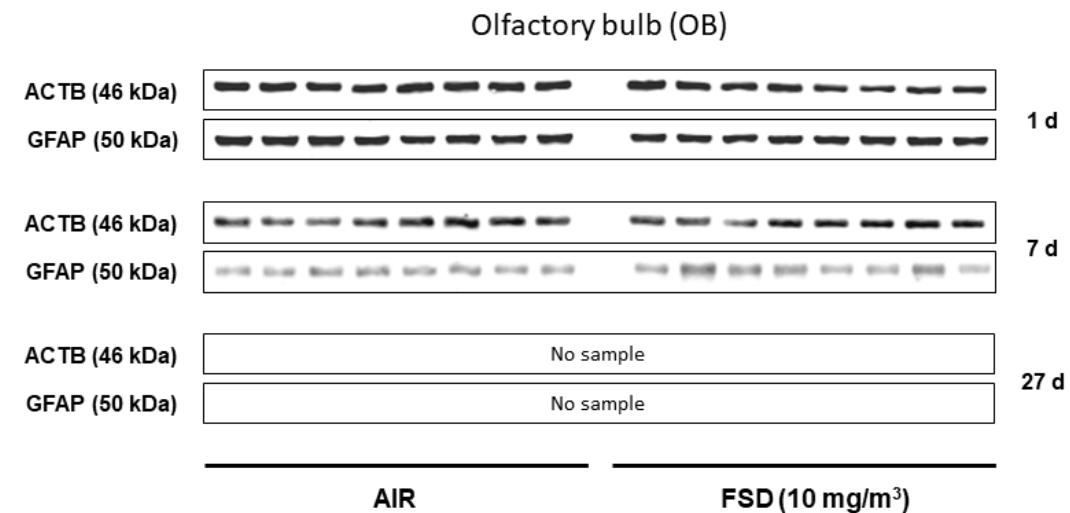


Fig. S4 B Sriram et al

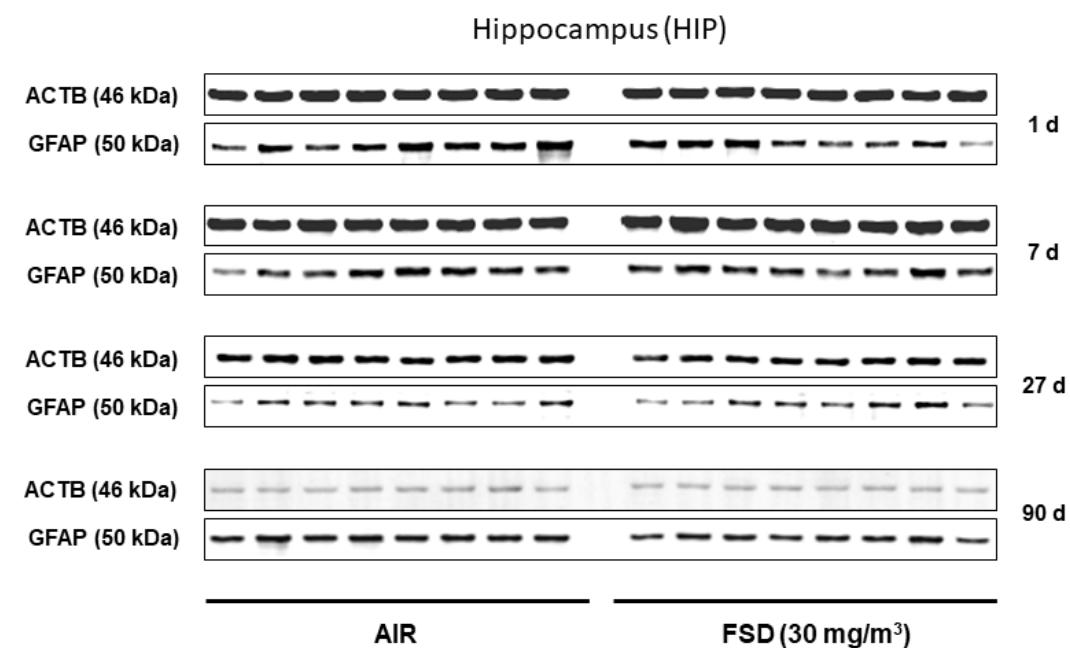
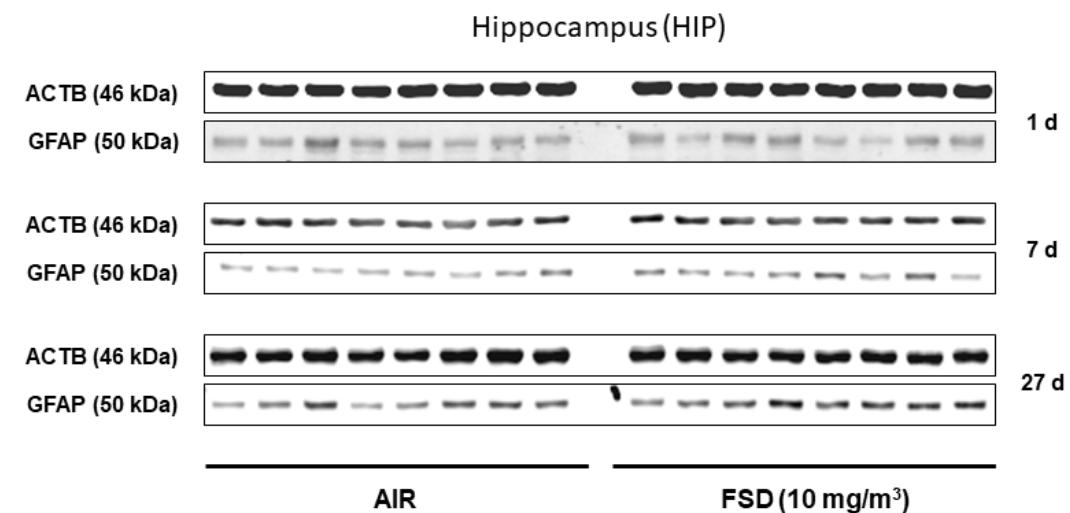


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Sriram et al

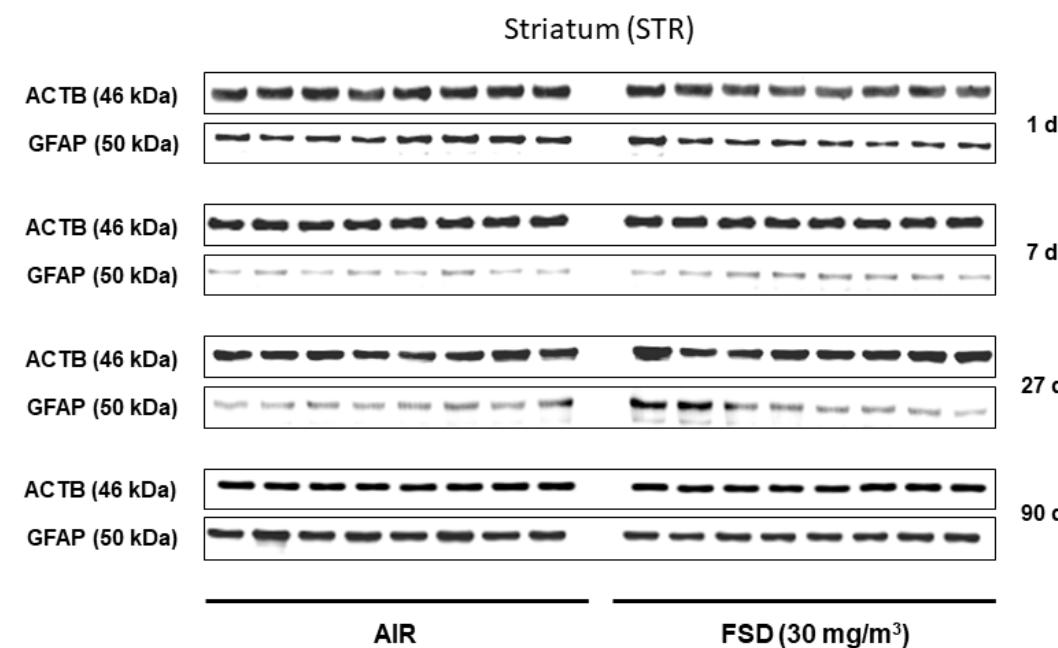
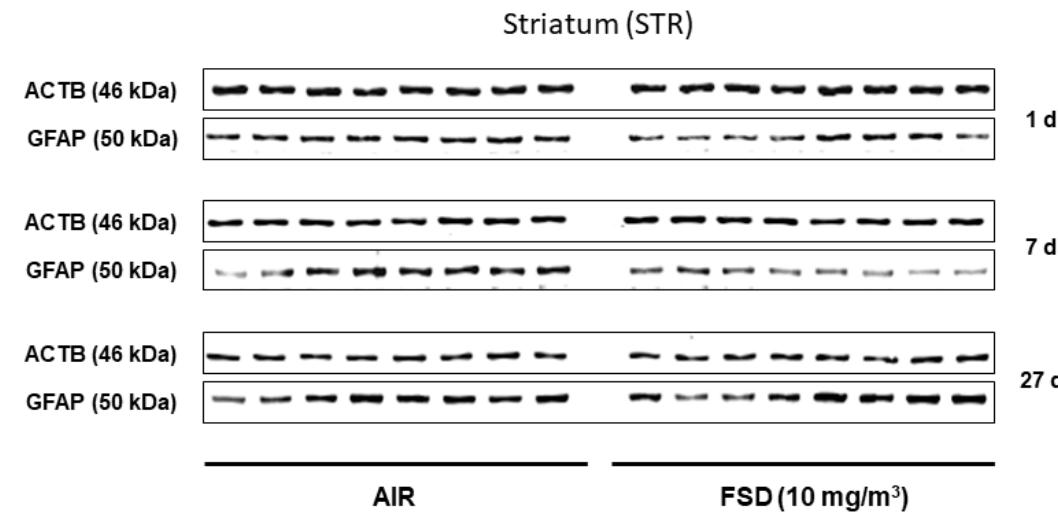


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Sriram et al

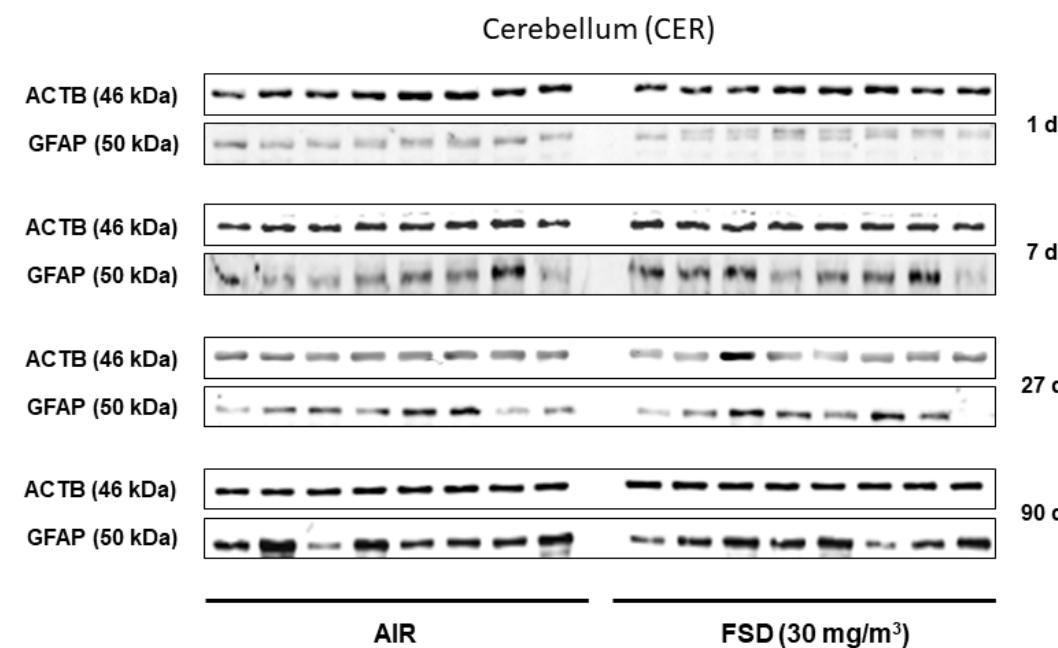
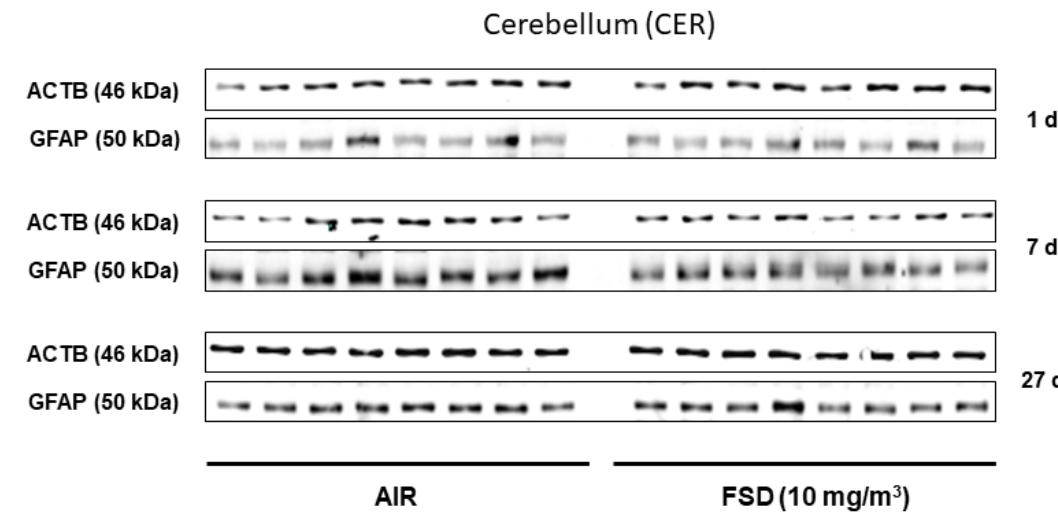


Fig. S5 A
Sriram et al

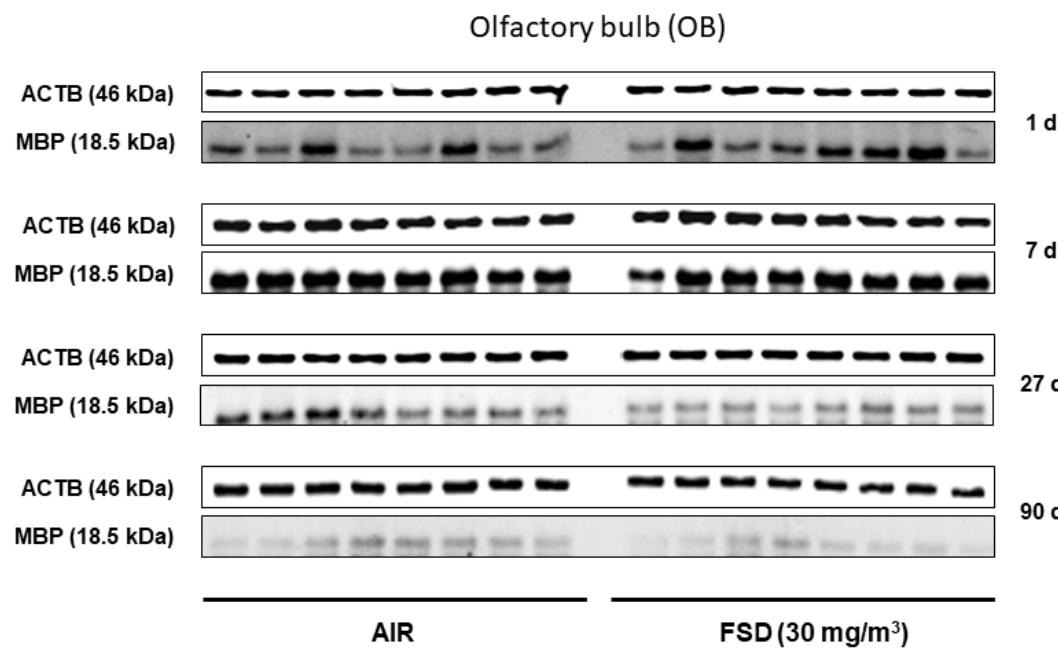
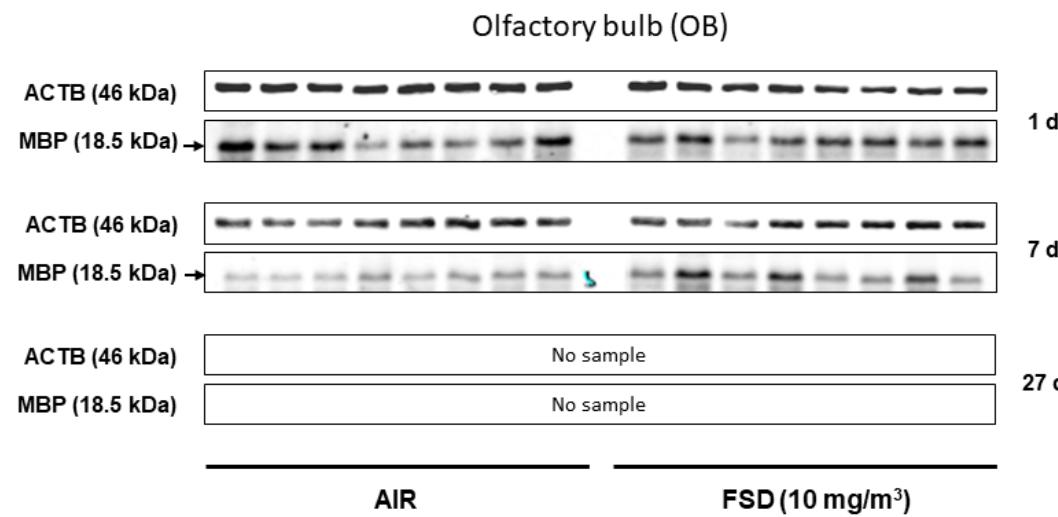


Fig. S5 B
Sriram et al

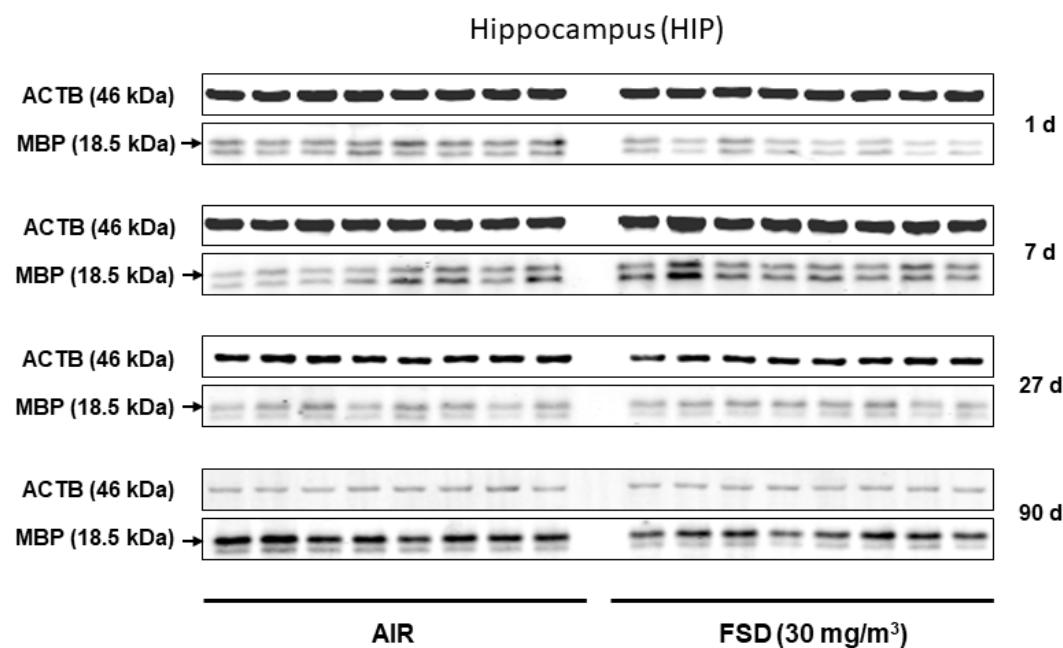
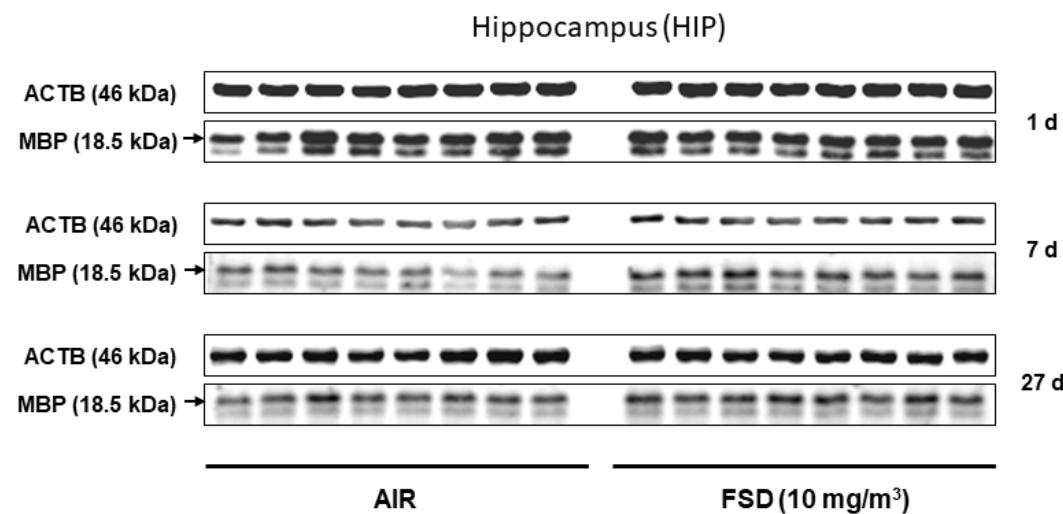


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Sriram et al

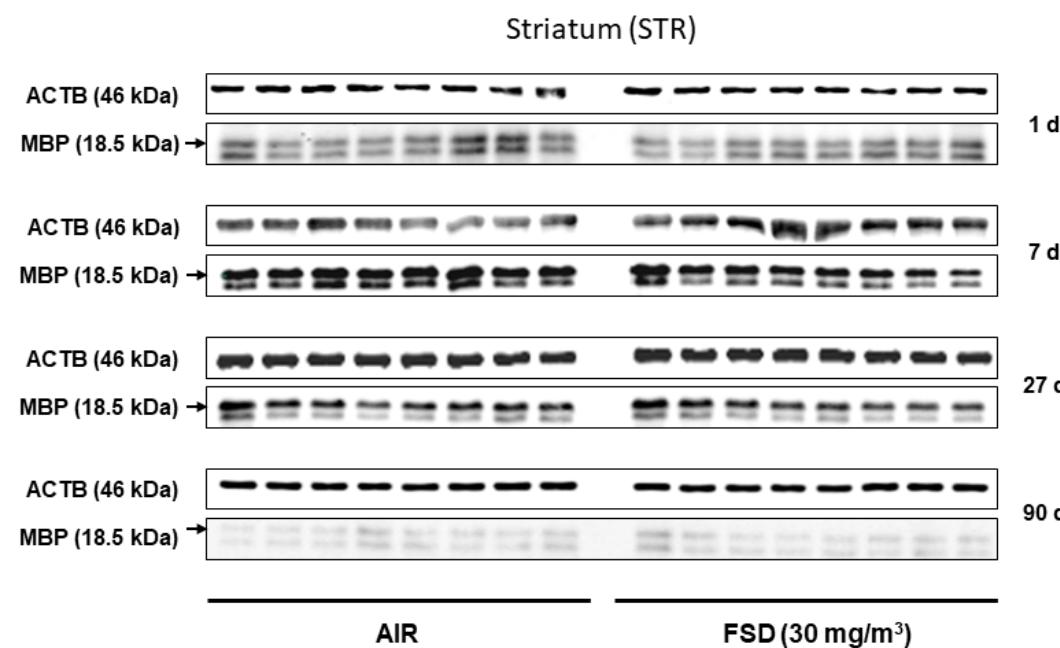
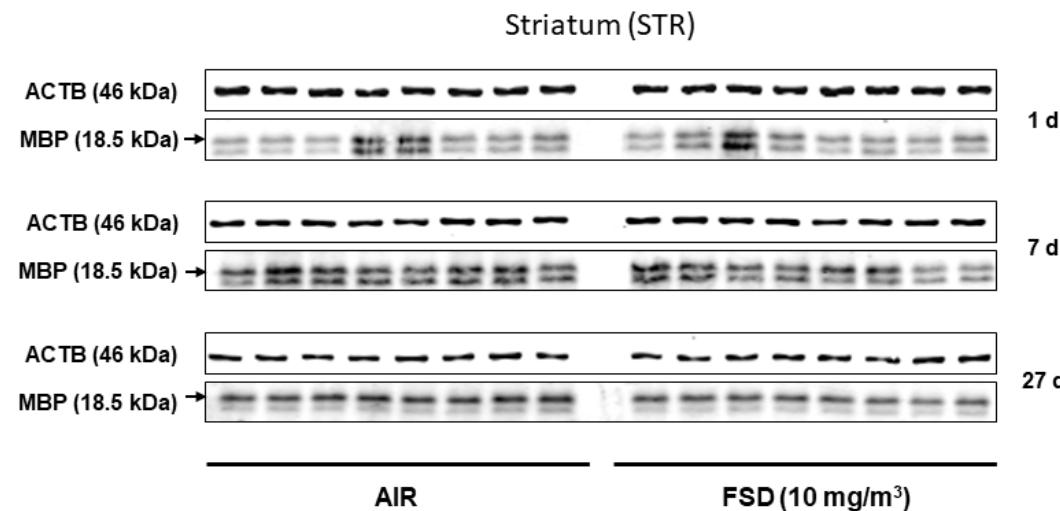


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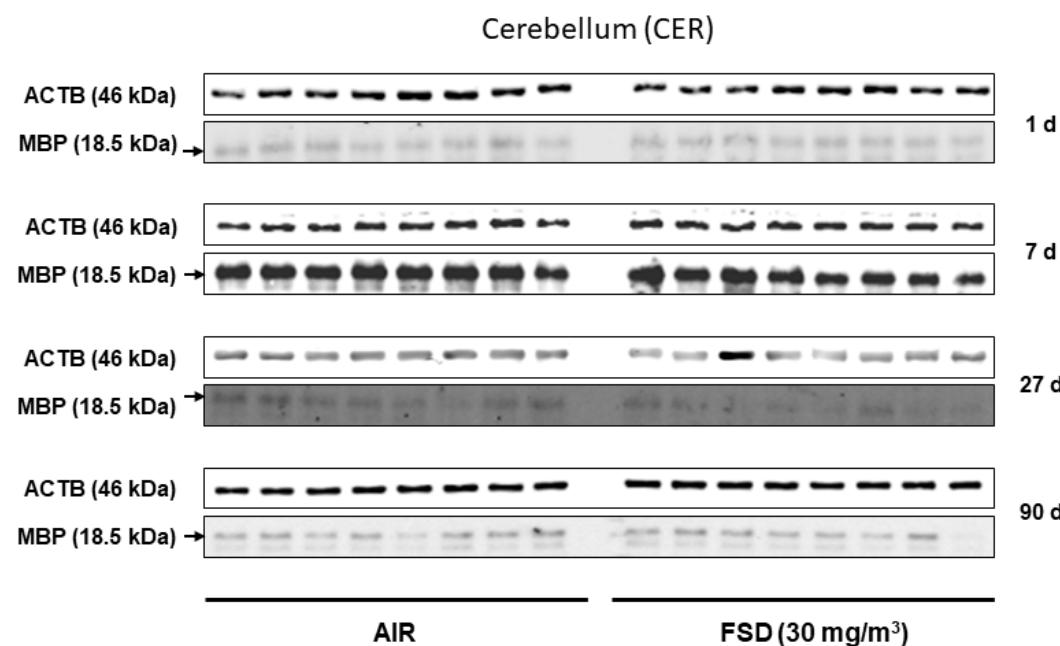
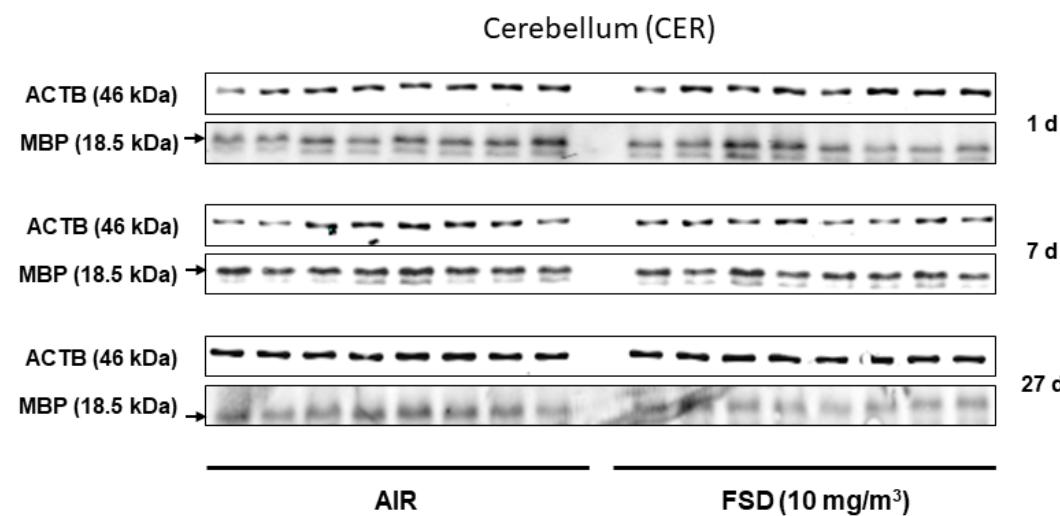


Table 1: Metabolites of dopamine and serotonin in olfactory bulb and hippocampus

Brain Region	Group	Dose	DOPAC	HVA	5-HIAA
OB	AIR 1 d	0	100.0 ± 6.3	100.0 ± 7.6	100.0 ± 14.7
	FSD 8 1 d	10 mg/m ³	107.3 ± 7.1	104.2 ± 3.8	99.4 ± 16.6
	AIR 7 d	0	100.0 ± 6.2	100.0 ± 4.5	100.0 ± 11.1
	FSD 8 7 d	10 mg/m ³	99.2 ± 6.6	97.5 ± 3.8	92.2 ± 5.6
	AIR 27 d	0	100.0 ± 4.6	100.0 ± 11.9	100.0 ± 7.2
	FSD 8 27 d	10 mg/m ³	84.2 ± 7.8	90.6 ± 13.2	92.2 ± 5.1
	AIR 1 d	0	100.0 ± 7.5	100.0 ± 7.4	100.0 ± 15.0
	FSD 8 1 d	30 mg/m ³	101.3 ± 4.2	89.9 ± 3.5	76.8 ± 9.5
	AIR 7 d	0	100.0 ± 3.7	100.0 ± 5.7	100.0 ± 4.8
	FSD 8 7 d	30 mg/m ³	78.1 ± 4.6*	79.0 ± 3.3*	82.5 ± 4.4
HIP	AIR 27 d	0	100.0 ± 4.1	100.0 ± 5.2	100.0 ± 8.5
	FSD 8 27 d	30 mg/m ³	94.3 ± 4.0	85.7 ± 5.4	108.3 ± 8.6
	AIR 1 d	0	100.0 ± 6.8	100.0 ± 9.3	100.0 ± 8.3
	FSD 8 1 d	10 mg/m ³	107.5 ± 10.0	98.5 ± 7.4 ^d	100.9 ± 12.5
	AIR 7 d	0	100.0 ± 5.7	100.0 ± 5.9	100.0 ± 7.8
	FSD 8 7 d	10 mg/m ³	121.4 ± 8.3	137.2 ± 12.4#	114.3 ± 3.7
	AIR 27 d	0	100.0 ± 8.3	100.0 ± 4.3	100.0 ± 3.1
	FSD 8 27 d	10 mg/m ³	84.6 ± 5.5	72.4 ± 6.4	84.6 ± 4.2
	AIR 1 d	0	100.0 ± 3.9	100.0 ± 14.2	100.0 ± 4.4
	FSD 8 1 d	30 mg/m ³	102.7 ± 3.7	83.5 ± 7.4	92.8 ± 3.5
CA1	AIR 7 d	0	100.0 ± 5.1	100.0 ± 11.4	100.0 ± 4.6
	FSD 8 7 d	30 mg/m ³	86.9 ± 3.4	83.8 ± 6.3	80.2 ± 8.4
	AIR 27 d	0	100.0 ± 16.3	100.0 ± 8.3	100.0 ± 6.0
	FSD 8 27 d	30 mg/m ³	95.2 ± 5.1	78.9 ± 4.0 ^c	93.7 ± 4.2

Values were calculated as ng/mg protein and are expressed as percent of corresponding air-exposed control. Data are mean SE ($n = 8$ /group with the following exceptions: ^c $n = 7$ due to one undetected

sample in assay group; ^d*n* = 6 due to two undetected samples in assay group). *Significant decrease from corresponding air-exposed control ($P < 0.05$). #Significant increase from corresponding air-exposed control ($P < 0.05$).

Table 2. Metabolites of dopamine and serotonin in striatum and cerebellum

Brain Region	Group	Dose	DOPAC	HVA	5-HIAA
STR	AIR 1 d	0	100.0 ± 9.3	100.0 ± 6.2	100.0 ± 8.8
	FSD 8 1 d	10 mg/m ³	93.9 ± 6.2	97.6 ± 3.6	102.8 ± 5.0
	AIR 7 d	0	100.0 ± 4.8	100.0 ± 3.6	100.0 ± 8.0
	FSD 8 7 d	10 mg/m ³	121.1 ± 5.0	118.1 ± 5.9	97.6 ± 4.5
	AIR 27 d	0	100.0 ± 6.1	100.0 ± 7.5	100.0 ± 3.6
	FSD 8 27 d	10 mg/m ³	78.4 ± 4.6*	82.2 ± 6.5	82.3 ± 4.3
	AIR 1 d	0	100.0 ± 3.0	100.0 ± 4.8	100.0 ± 4.3
	FSD 8 1 d	30 mg/m ³	109.6 ± 6.4	104.9 ± 6.1	94.9 ± 6.5
	AIR 7 d	0	100.0 ± 5.9	100.0 ± 4.7	100.0 ± 4.5
	FSD 8 7 d	30 mg/m ³	92.4 ± 3.1	92.1 ± 3.9	97.6 ± 4.9
CER	AIR 27 d	0	100.0 ± 2.3	100.0 ± 3.6	100.0 ± 6.9
	FSD 8 27 d	30 mg/m ³	97.2 ± 5.1	89.1 ± 6.2	101.8 ± 6.8
	AIR 1 d	0	100.0 ± 4.0	100.0 ± 5.4	100.0 ± 5.6
	FSD 8 1 d	10 mg/m ³	109.5 ± 4.8	100.2 ± 5.7	111.8 ± 4.7
	AIR 7 d	0	100.0 ± 4.4	100.0 ± 5.7	100.0 ± 3.4
	FSD 8 7 d	10 mg/m ³	104.9 ± 2.6	103.6 ± 3.2	106.5 ± 3.2
	AIR 27 d	0	100.0 ± 8.3	100.0 ± 9.7	100.0 ± 9.0
	FSD 8 27 d	10 mg/m ³	97.0 ± 5.0	109.2 ± 7.5	96.9 ± 4.7
	AIR 1 d	0	100.0 ± 6.5	100.0 ± 6.5	100.0 ± 4.8
	FSD 8 1 d	30 mg/m ³	102.3 ± 5.0	88.9 ± 3.6	97.8 ± 4.5
STG	AIR 7 d	0	100.0 ± 3.8	100.0 ± 4.4	100.0 ± 3.0
	FSD 8 7 d	30 mg/m ³	88.4 ± 5.2 ^a	92.8 ± 3.9	107.4 ± 4.6
	AIR 27 d	0	100.0 ± 9.3	100.0 ± 6.2	100.0 ± 4.8
	FSD 8 27 d	30 mg/m ³	102.4 ± 4.3	92.1 ± 12.6	94.9 ± 6.3

Values were calculated as ng/mg protein and are expressed as percent of corresponding air-exposed control. Data are mean ± SE (n = 8/group with the following exception: ^an = 7 due to one outlier sample in assay group). *Significant decrease from corresponding air-exposed control (P < 0.05).

Table 3: Dopamine and serotonin metabolite ratios in the olfactory bulb and hippocampus

Brain Region	Group	Dose	DOPAC/DA	HVA/DA	(DOPAC+HVA)/DA	5-HIAA/5-HT
OB	AIR 1 d	0	100 ± 3.9	100 ± 4.2	100 ± 4.0	100 ± 12.6
	FSD 8 1 d	10 mg/m ³	103.1 ± 3.9	99.7 ± 3.9	100.3 ± 3.9	102.1 ± 3.9
	AIR 7 d	0	100 ± 5.4	100 ± 4.9	100 ± 4.7	100 ± 5.3
	FSD 8 7 d	10 mg/m ³	96.6 ± 3.1	96.2 ± 3.1	96.2 ± 2.8	80.8 ± 5.8
	AIR 27 d	0	100 ± 5.7	100 ± 7.1	100 ± 4.8	100 ± 8.6
	FSD 8 27 d	10 mg/m ³	84.0 ± 4.5*	91.0 ± 7.9	88.0 ± 6.0	138.3 ± 7.7#
	AIR 1 d	0	100 ± 6.2	100 ± 3.8	100 ± 4.2	100 ± 12.4
	FSD 8 1 d	30 mg/m ³	105.6 ± 7.9	93.4 ± 4.8	98.2 ± 6.0	88.3 ± 11.0
HIP	AIR 7 d	0	100 ± 6.4	100 ± 3.7	100 ± 3.6	100 ± 3.6
	FSD 8 7 d	30 mg/m ³	98.7 ± 3.6	102.1 ± 5.0	100.8 ± 3.2	92.2 ± 4.1
	AIR 27 d	0	100 ± 4.0	100 ± 4.5	100 ± 3.7	100 ± 7.3
	FSD 8 27 d	30 mg/m ³	91.9 ± 4.2	83.2 ± 4.6	87.0 ± 4.0	102.7 ± 9.4
	AIR 1 d	0	100 ± 14.3	100 ± 12.6	100 ± 13.7	100 ± 3.5
	FSD 8 1 d	10 mg/m ³	88.1 ± 7.9	83.9 ± 10.2 ^d	81.9 ± 8.8	85.0 ± 6.5
	AIR 7 d	0	100 ± 17.3	100 ± 13.9	100 ± 15.0	100 ± 2.9
	FSD 8 7 d	10 mg/m ³	83.9 ± 14.6 ^c	91.3 ± 12.1 ^(c)	87.6 ± 12.8 ^c	97.9 ± 2.0 ^c
	AIR 27 d	0	100 ± 8.7	100 ± 6.2	100 ± 6.7	100 ± 4.5
	FSD 8 27 d	10 mg/m ³	127.3 ± 27.2	104.1 ± 16.6	119.3 ± 23.3	93.1 ± 5.4
	AIR 1 d	0	100 ± 8.6	100 ± 9.3	100 ± 7.2	100 ± 3.0
	FSD 8 1 d	30 mg/m ³	114.1 ± 13.0	94.4 ± 7.6	111.9 ± 12.3	97.7 ± 2.3
	AIR 7 d	0	100 ± 9.0	100 ± 9.3	100 ± 8.4	100 ± 4.0
	FSD 8 7 d	30 mg/m ³	100.1 ± 13.8	99.2 ± 13.7	100 ± 13.6	83.5 ± 7.7
	AIR 27 d	0	100 ± 23.3	100 ± 12.5	100 ± 19.0	100 ± 9.3
	FSD 8 27 d	30 mg/m ³	108.9 ± 12.5	87.9 ± 10.0 ^c	101.6 ± 12 ^c	108.1 ± 5.0

Values were calculated as ng/mg protein. The ratios DOPAC/DA, HVA/DA, (DOPAC+HVA)/DA, and 5-HIAA/5-HT were determined and are expressed as percent of corresponding air-exposed control. Data are mean \pm SE ($n = 8$ /group with the following exceptions: ^c $n = 7$ due to one undetected sample in assay group; ^d $n = 6$ due to two undetected samples in assay group). *Significant decrease from corresponding air-exposed control ($P < 0.05$). [#]Significant increase from corresponding air-exposed control ($P < 0.05$).

Table 3: Dopamine and serotonin metabolite ratios in the olfactory bulb and hippocampus

Brain Region	Group	Dose	DOPAC/DA	HVA/DA	(DOPAC+HVA)/DA	5-HIAA/5-HT
OB	AIR 1 d	0	100 ± 3.9	100 ± 4.2	100 ± 4.0	100 ± 12.6
	FSD 1 d	10 mg/m ³	103.1 ± 3.9	99.7 ± 3.9	100.3 ± 3.9	102.1 ± 3.9
	AIR 7 d	0	100 ± 5.4	100 ± 4.9	100 ± 4.7	100 ± 5.3
	FSD 7 d	10 mg/m ³	96.6 ± 3.1	96.2 ± 3.1	96.2 ± 2.8	80.8 ± 5.8
	AIR 27 d	0	100 ± 5.7	100 ± 7.1	100 ± 4.8	100 ± 8.6
	FSD 27 d	10 mg/m ³	84.0 ± 4.5 *	91.0 ± 7.9	88.0 ± 6.0	138.3 ± 7.7 #
	AIR 1 d	0	100 ± 6.2	100 ± 3.8	100 ± 4.2	100 ± 12.4
	FSD 1 d	30 mg/m ³	105.6 ± 7.9	93.4 ± 4.8	98.2 ± 6.0	88.3 ± 11.0
	AIR 7 d	0	100 ± 6.4	100 ± 3.7	100 ± 3.6	100 ± 3.6
	FSD 7 d	30 mg/m ³	98.7 ± 3.6	102.1 ± 5.0	100.8 ± 3.2	92.2 ± 4.1
HIP	AIR 27 d	0	100 ± 4.0	100 ± 4.5	100 ± 3.7	100 ± 7.3
	FSD 27 d	30 mg/m ³	91.9 ± 4.2	83.2 ± 4.6	87.0 ± 4.0	102.7 ± 9.4
	AIR 1 d	0	100 ± 14.3	100 ± 12.6	100 ± 13.7	100 ± 3.5
	FSD 1 d	10 mg/m ³	88.1 ± 7.9	83.9 ± 10.2 ^(d)	81.9 ± 8.8	85.0 ± 6.5
	AIR 7 d	0	100 ± 17.3	100 ± 13.9	100 ± 15.0	100 ± 2.9
	FSD 7 d	10 mg/m ³	83.9 ± 14.6 ^(e)	91.3 ± 12.1 ^(e)	87.6 ± 12.8 ^(e)	97.9 ± 2.0 ^(e)
	AIR 27 d	0	100 ± 8.7	100 ± 6.2	100 ± 6.7	100 ± 4.5
	FSD 27 d	10 mg/m ³	127.3 ± 27.2	104.1 ± 16.6	119.3 ± 23.3	93.1 ± 5.4
	AIR 1 d	0	100 ± 8.6	100 ± 9.3	100 ± 7.2	100 ± 3.0
	FSD 1 d	30 mg/m ³	114.1 ± 13.0	94.4 ± 7.6	111.9 ± 12.3	97.7 ± 2.3
HIP	AIR 7 d	0	100 ± 9.0	100 ± 9.3	100 ± 8.4	100 ± 4.0
	FSD 7 d	30 mg/m ³	100.1 ± 13.8	99.2 ± 13.7	100 ± 13.6	83.5 ± 7.7
	AIR 27 d	0	100 ± 23.3	100 ± 12.5	100 ± 19.0	100 ± 9.3

FSD 27 d 30 mg/m³ 108.9 ± 12.5 87.9 ± 10.0 ^(c) 101.6 ± 12.1 ^(c) 108.1 ± 5.0

DA, DOPAC, HVA, 5-HT and 5-HIAA were measured by HPLC-EC. Values were calculated as ng/mg protein. The ratios DOPAC/DA, HVA/DA, (DOPAC+HVA)/DA, and 5-HIAA/5-HT were determined and are expressed as percent of corresponding air-exposed control. Data are mean ± SE (n = 8/group with the following exceptions: ^(c) n = 7 due to one undetected sample in assay group; ^(d) n = 6 due to two undetected samples in assay group). * significant decrease from corresponding air-exposed control (P < 0.05). # significant increase from corresponding air-exposed control (P < 0.05).

Table 4. Dopamine and serotonin metabolite ratios in the striatum and cerebellum

Brain Region	Group	Dose	DOPAC/DA	HVA/DA	(DOPAC+HVA)/DA	5-HIAA/5-HT
STR	AIR 1 d	0	100 ± 5.4	100 ± 4.3	100 ± 4.4	100 ± 3.0
	FSD 8 1 d	10 mg/m ³	91.0 ± 2.9	94.1 ± 2.7	92.6 ± 2.1	87.2 ± 3.4
	AIR 7 d	0	100 ± 4.8	100 ± 3.3	100 ± 3.8	100 ± 8.2
	FSD 8 7 d	10 mg/m ³	99.2 ± 3.2	96.9 ± 4.5	97.9 ± 3.5	83.7 ± 3.0
	AIR 27 d	0	100 ± 4.8	100 ± 5.4	100 ± 4.7	100 ± 3.7
	FSD 8 27 d	10 mg/m ³	91.5 ± 4.4	96.3 ± 7.0	93.6 ± 5.0	96.0 ± 3.9
	AIR 1 d	0	100 ± 2.3	100 ± 3.2	100 ± 2.3	100 ± 3.4
	FSD 8 1 d	30 mg/m ³	101.5 ± 1.6	97.4 ± 1.2	99.9 ± 1.0	99.9 ± 2.7
	AIR 7 d	0	100 ± 2.7	100 ± 4.6	100 ± 3.0	100 ± 3.7
	FSD 8 7 d	30 mg/m ³	90.3 ± 1.3	89.0 ± 2.0	89.7 ± 1.3	92.7 ± 3.3
CER	AIR 27 d	0	100 ± 3.8	100 ± 5.0	100 ± 4.1	100 ± 3.5
	FSD 8 27 d	30 mg/m ³	98.6 ± 5.1	89.9 ± 5.2	95.1 ± 4.8	96.4 ± 5.7
	AIR 1 d	0	100 ± 4.1	100 ± 3.9	100 ± 3.5	100 ± 3.4
	FSD 8 1 d	10 mg/m ³	95.0 ± 7.8	87.9 ± 8.2	91.5 ± 7.6	90.0 ± 7.8
	AIR 7 d	0	100 ± 5.2	100 ± 6.2	100 ± 5.0	100 ± 4.0
	FSD 8 7 d	10 mg/m ³	108.4 ± 6.2	106.3 ± 4.1	107.3 ± 4.7	108.6 ± 6.2
	AIR 27 d	0	100 ± 12.3	100 ± 13.3	100 ± 10.3	100 ± 9.6
	FSD 8 27 d	10 mg/m ³	100.4 ± 6.5	112.7 ± 10.5	105.2 ± 6.5	99.4 ± 5.5
	AIR 1 d	0	100 ± 5.0	100 ± 3.7	100 ± 4.3	100 ± 4.3
	FSD 8 1 d	30 mg/m ³	100.8 ± 8.7	87.0 ± 4.8	98.6 ± 7.9	90.2 ± 7.8
STG	AIR 7 d	0	100 ± 6.6 ^(a)	100 ± 4.8 ^a	100 ± 5.7 ^a	100 ± 5.8
	FSD 8 7 d	30 mg/m ³	89.5 ± 6.9	94.5 ± 5.4	90.3 ± 6.2	94.1 ± 5.6
	AIR 27 d	0	100 ± 11.3	100 ± 7.4	100 ± 10.5	100 ± 6.2
	FSD 8 27 d	30 mg/m ³	99.5 ± 4.4	88.9 ± 9.9	98.5 ± 4.5	88.3 ± 6.8

Values were calculated as ng/mg protein. The ratios DOPAC/DA, HVA/DA, (DOPAC+HVA)/DA, and 5-HIAA/5-HT were determined and are expressed as percent of corresponding air-exposed control. Data are mean±SE ($n = 8/\text{group}$ with the following exception: ^a $n = 7$ due to one outlier sample in assay group).