

Figure S1

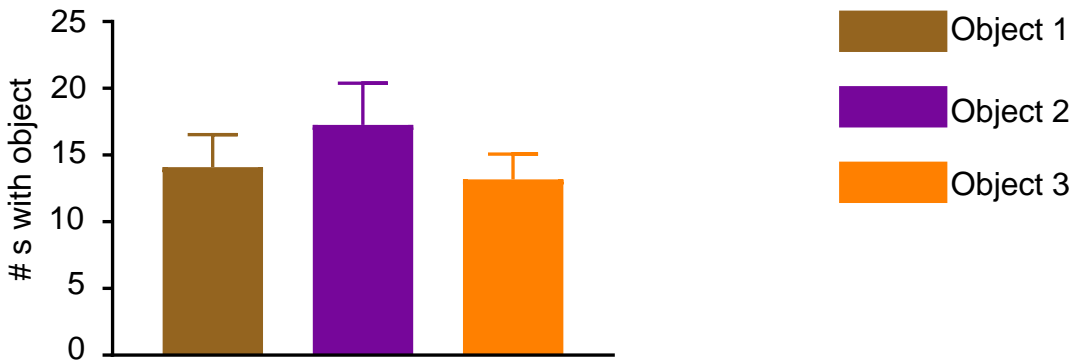


Figure S2

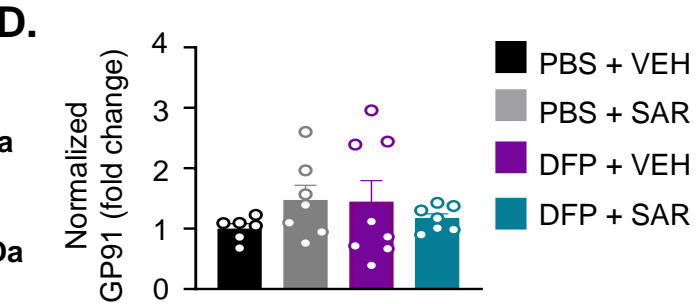
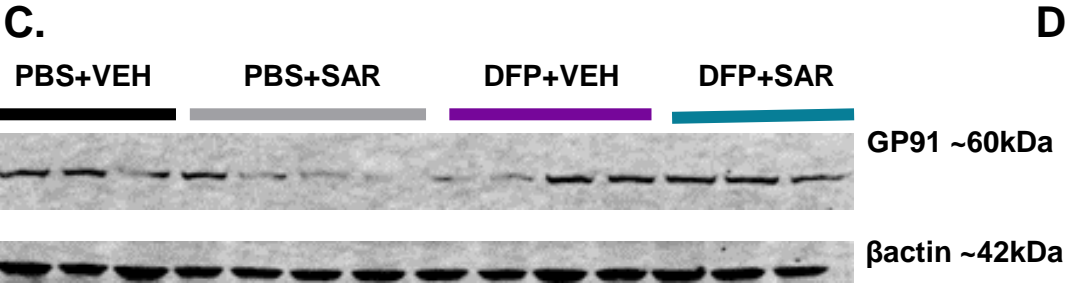
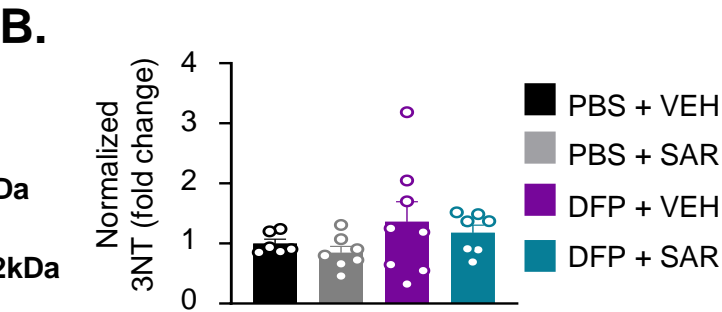
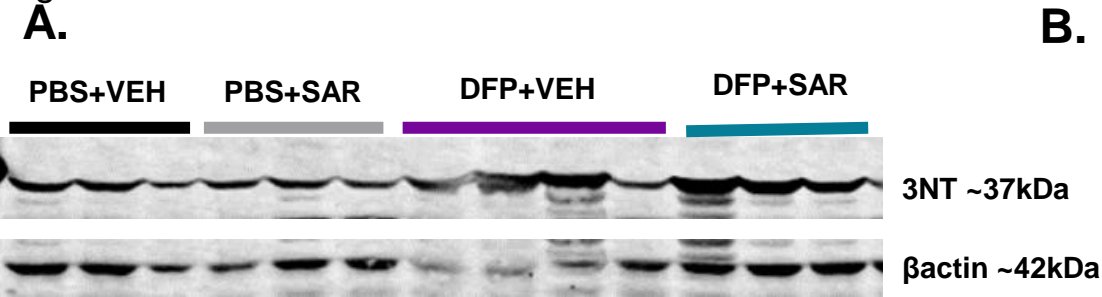


Table S1. Antibody suppliers and concentrations

Antibody	Species	Supplier	Concentration	
			IHC	WB
IBA1	Anti-goat	Abcam	1:400	
GFAP	Anti-mouse	Sigma Aldrich	1:400	
CD68	Anti-rabbit	Abcam	1:300	
NeuN	Anti-rabbit	Millipore	1:400	
iNOS	Anti-rabbit	Abcam	1:100	
3-NT	Anti-mouse	Abcam	1:100	1:1000
β-actin	Anti-rabbit	Sigma Aldrich		1:10000
β-actin	Anti-mouse	Sigma Aldrich		1:10000
GP91 <sup>phox</sup>	Anti-mouse	Santa Cruz	1:100	1:1000
Biotinylated	Anti-goat	Jackson ImmunoResearch	1:300	
Biotinylated	Anti-rabbit	Jackson ImmunoResearch	1:300	
Alexaflour	Anti-mouse	Jackson ImmunoResearch	1:80	
Alexaflour	Anti-rabbit	Jackson ImmunoResearch	1:80	
Streptavidin CY3		Jackson ImmunoResearch	1:300	
IRDye 800CW	Anti-rabbit	LI-COR Biosciences		1:10000
IRDye 800CW	Anti-mouse	LI-COR Biosciences		1:10000
IRDye 800CW	Anti-goat	LI-COR Biosciences		1:10000
IRDye 680LT	Anti-mouse	LI-COR Biosciences		1:10000
IRDye 680LT	Anti-rabbit	LI-COR Biosciences		1:10000

Table S2. Summary of Regression for Glial cell markers and iNOS. \*Indicates p<0.05

Glial cell marker	Oxidative stress marker	Region	Experimental Group	R <sup>2</sup>
IBA1	iNOS	PC	PBS+VEH	0.073
IBA1	iNOS	PC	PBS+SAR	0.163
IBA1	iNOS	PC	DFP+VEH	<b>0.577*</b>
IBA1	iNOS	PC	DFP+SAR	0.007
IBA1	iNOS	AMY	PBS+VEH	0.109
IBA1	iNOS	AMY	PBS+SAR	0.479
IBA1	iNOS	AMY	DFP+VEH	<b>0.660*</b>
IBA1	iNOS	AMY	DFP+SAR	0.028
GFAP	iNOS	PC	PBS+VEH	0.033
GFAP	iNOS	PC	PBS+SAR	0.33
GFAP	iNOS	PC	DFP+VEH	0.225
GFAP	iNOS	PC	DFP+SAR	<b>0.737*</b>
GFAP	iNOS	AMY	PBS+VEH	0.336
GFAP	iNOS	AMY	PBS+SAR	0.45
GFAP	iNOS	AMY	DFP+VEH	0.28
GFAP	iNOS	AMY	DFP+SAR	0.117

Table S3. Summary of Regression for Glial cell markers and 3NT. \*Indicates p<0.05

Glial cell marker	Oxidative stress marker	Region	Experimental Group	R <sup>2</sup>
IBA1	3NT	PC	PBS+VEH	0.037
IBA1	3NT	PC	PBS+SAR	<b>0.856*</b>
IBA1	3NT	PC	DFP+VEH	<b>0.784*</b>
IBA1	3NT	PC	DFP+SAR	0.000
IBA1	3NT	AMY	PBS+VEH	0.260
IBA1	3NT	AMY	PBS+SAR	<b>0.825*</b>
IBA1	3NT	AMY	DFP+VEH	<b>0.541*</b>
IBA1	3NT	AMY	DFP+SAR	0.024
GFAP	3NT	PC	PBS+VEH	0.587
GFAP	3NT	PC	PBS+SAR	0.018
GFAP	3NT	PC	DFP+VEH	0.194
GFAP	3NT	PC	DFP+SAR	0.010
GFAP	3NT	AMY	PBS+VEH	0.218
GFAP	3NT	AMY	PBS+SAR	0.163
GFAP	3NT	AMY	DFP+VEH	0.127
GFAP	3NT	AMY	DFP+SAR	0.064

Table S4. Summary of Regression for Glial cell markers and GP91<sup>phox</sup>. Indicates p<0.05

Glial cell marker	Oxidative stress marker	Region	Experimental Group	R <sup>2</sup>
IBA1	GP91 <sup>phox</sup>	PC	PBS+VEH	0.441
IBA1	GP91 <sup>phox</sup>	PC	PBS+SAR	0.022
IBA1	GP91 <sup>phox</sup>	PC	DFP+VEH	0.029
IBA1	GP91 <sup>phox</sup>	PC	DFP+SAR	0.178
IBA1	GP91 <sup>phox</sup>	AMY	PBS+VEH	0.196
IBA1	GP91 <sup>phox</sup>	AMY	PBS+SAR	0.020
IBA1	GP91 <sup>phox</sup>	AMY	DFP+VEH	0.002
IBA1	GP91 <sup>phox</sup>	AMY	DFP+SAR	<b>0.545*</b>
GFAP	GP91 <sup>phox</sup>	PC	PBS+VEH	0.009
GFAP	GP91 <sup>phox</sup>	PC	PBS+SAR	0.020
GFAP	GP91 <sup>phox</sup>	PC	DFP+VEH	0.192
GFAP	GP91 <sup>phox</sup>	PC	DFP+SAR	0.010
GFAP	GP91 <sup>phox</sup>	AMY	PBS+VEH	0.007
GFAP	GP91 <sup>phox</sup>	AMY	PBS+SAR	0.132
GFAP	GP91 <sup>phox</sup>	AMY	DFP+VEH	0.058
GFAP	GP91 <sup>phox</sup>	AMY	DFP+SAR	0.352