Sex Differences in the Modulation of Anxiety- and Depression-like Behaviors by Matrix Metalloproteinase-9 Expression Levels in Mice

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SUPPLEMENTARY MATERIAL

Table S1. Primary antibodies used for protein detection by Western Blot, with their corresponding dilution, reference, supplier, Research Resource Identifiers (RRIDs), and references. BDNF: brain-derived neurotrophic factor; mTOR: mammalian target of rapamycin; PSD95: postsynaptic density protein 95; rb: rabbit; m: mouse; g: goat; RRID: research resource identifier.

ANTIBODY	DILUTION	REFERENCE	SUPPLIER	RRIDs	REFERENCES
β-tubulin III (rb, m)	1:20000	T2200/T8660	Sigma–Aldrich	AB_262133/ AB_477590	[1], [2], [3], [4], [5], [6]
BDNF (rb)	1:500	ab108319	Abcam	AB_10862052	[7], [8], [9], [10], [11]
mTOR (m)	1:1000	#4517	Cell Signaling Technology	AB_1904056	[12], [13], [14], [15]
Phospho-mTOR (Ser2448) (rb)	1:1000	#2971	Cell Signaling Technology	AB_330970	[12], [13], [16], [17], [18], [19]
PSD95 (g)	1:200	sc-8575	Santa Cruz Biotechnology	AB_2092357	[18], [20], [21]
Synapsin Ia/b (m)	1:200	sc-390867	Santa Cruz Biotechnology	AB_3678685	[22], [23]

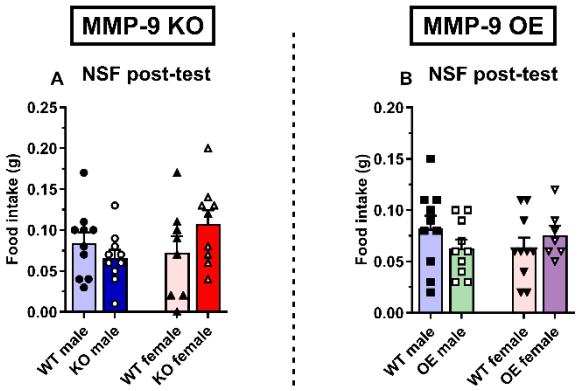

Figure S1. Post-test of the novelty-suppressed feeding test. Food consumed by MMP-9 KO (A) and MMP-9 OE (B) male and female mice in their homecage following the novelty-suppressed feeding test. The data are expressed as the means ± SEMs. Two-way ANOVA followed by an uncorrected Fisher's LSD post hoc test. n = 7–10 animals per group. WT: wild-type mice; KO: MMP-9 knockout mice; OE: MMP-9-overexpressing mice.

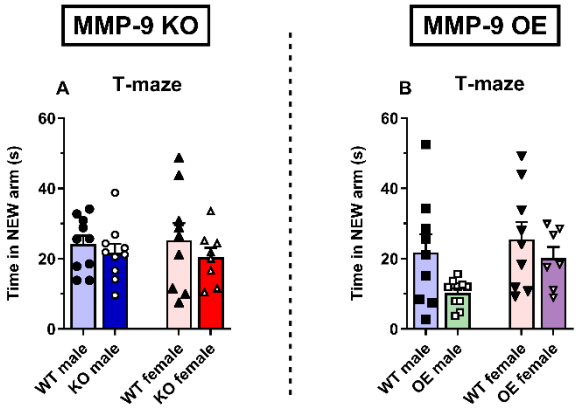

Figure S2. Spatial working memory in MMP-9 KO (A) and MMP-9 OE (B) male and female mice assessed by the time spent in the novel arm in the T-maze. The results are expressed as the means ± S.E.M.s. Two-way ANOVA followed by a Tukey's *post hoc* test. n= 8 - 10 animals per group. WT: wild-type mice; KO: MMP-9 knockout mice; OE: MMP-9-overexpressing mice.

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