

Fig. S11

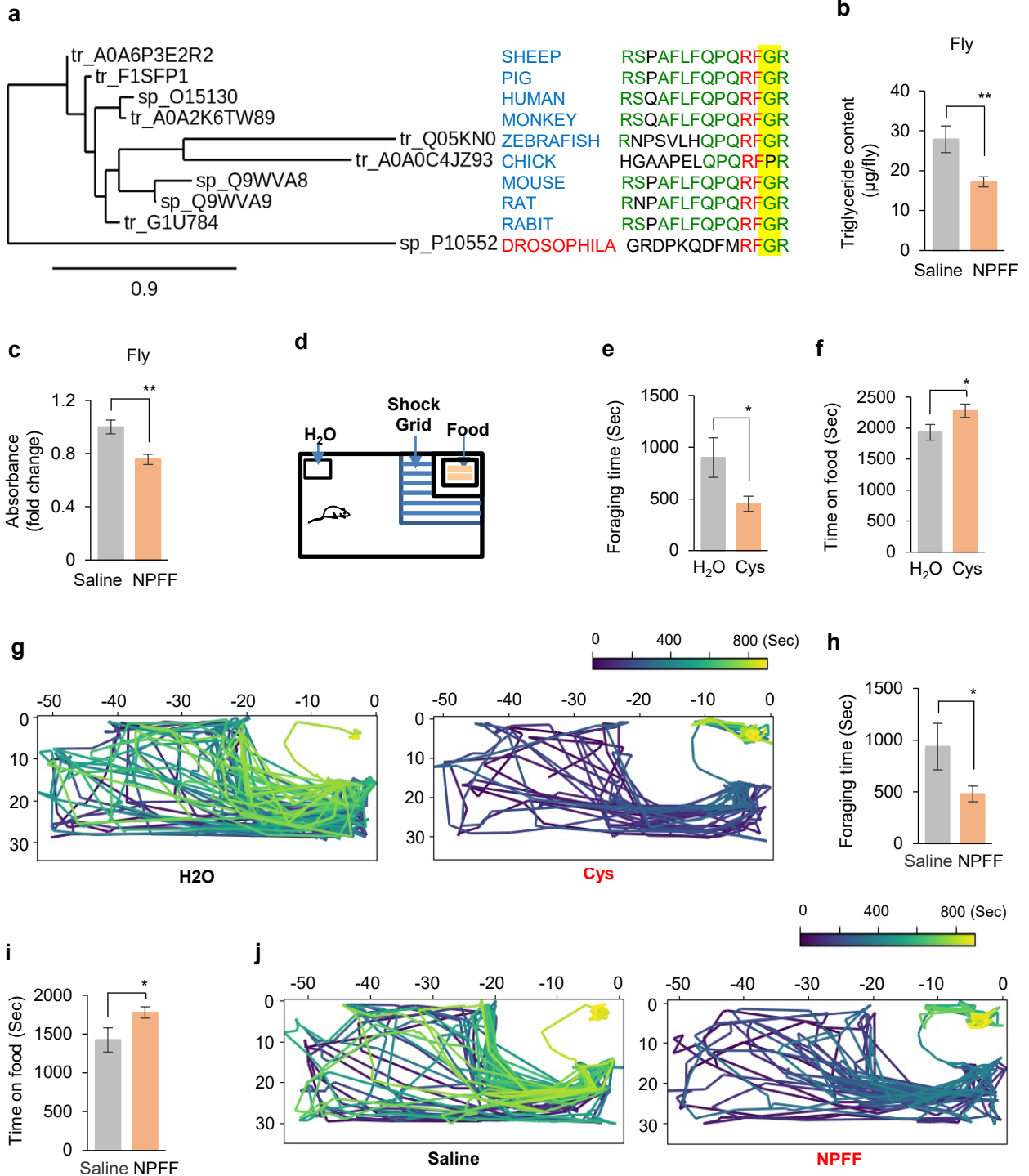


Fig. S11: Dietary cysteine and NPFF administration enhanced foraging behavior in mice.

a Comparison of the core amino acid sequence of *Drosophila* FMRFamide with various vertebrate analogous genes. **(b-c)** Triglyceride content (b) and food consumption (c) of flies injected with synthetic NPFF (n=8-9). Individual flies were injected twice in 6 hours before measurement of triglyceride content, and injected once 30 mins before the feeding assay. **d** Schematic illustration of the video recording-based foraging assay for mice. **(e-f)** Latency to reach the food source (e) and total duration on food (f) for mice orally gavage with cysteine (4 mmol/kg per day for 60 days) (n=11-14). Mice were starved for 24 hours before the foraging assays. **g** The pseudocolored (as a function of time) moving trajectories of individual mice. **(h-i)** Latency to reach the food source (h) and total duration on food (i) for mice with IV administration of NPFF (3.2 mg/kg per 12 hours for 40 days) (n=28-29). Mice were starved for 24 hours before the foraging assays. **j** The pseudocolored (as a function of time) moving trajectories of individual mice. *p < 0.05; **p < 0.01. Student's t-test was used for pair-wise comparisons.