LPS injection (30 µg/mouse, i.c.v.)

Y-maze test Novel object recognition test

-1 0 7 10 12 (days)

Administration of betaine (0.081, 0.163 and 0.326 mmol/kg/day, s.c.) or saline (s.c.)

Real time RT-PCR analysis

(A) Experimental schedule of Fig. 2 - 6.

LPS injection (30 µg/mouse, i.c.v.)

Y-maze test Novel object recognition test

-1 0 1 7 10 11 12 (days)

Administration of betaine (0.163 mmol/kg, s.c.) or saline (s.c.) 1 hr before, 1 and 24 hr after LPS injection

(B) Experimental schedule of Fig. 7.

LPS injection (30 µg/mouse, i.c.v.)

Y-maze test Novel object recognition test

-1 0 1 7 10 11 12 (days)

Administration of betaine (0.163 mmol/kg, s.c.) or saline (s.c.) 1 hr before, 1 and 24 hr after LPS injection

(C) Experimental schedule of Fig. 8.

LPS injection (30 µg/mouse, i.c.v.)

Y-maze test

-1 0 1 7 (days)

Administration of betaine (0.163 mmol/kg, s.c.) or saline (s.c.) 1 hr before or after LPS injection