M07: TDAR SRBC: Spleen AFC

Study Number: I99067
DTTID: 103-002-003-000-9
Study Type: immune screening
Species/Strain: Rat/Harlan Sprague Dawley

Test Compound: Echinacea purpurea extract
CAS Number: 90028-20-9
DTXSID: DTXSID0031265

Date: 06 Jun 2025
Time: 10:52:50 AM

Females: SRBC

	Treatment Groups						
	0 mg/kg	125 mg/kg	250 mg/kg	500 mg/kg	1000 mg/kg	2000 mg/kg	15 mg/kg CPS
Spleen Weight (g)	0.544 ± 0.015[12]	0.573 ± 0.027[12]	0.570 ± 0.021[12]	0.580 ± 0.017[12]	0.566 ± 0.019[12]	0.608 ± 0.023[12]	0.413 ± 0.020[8]**
Spleen Cells (x10^6)	330.20 ± 25.32[12]	440.40 ± 49.70[12]	451.20 ± 34.39[12]	448.70 ± 31.53[12]	395.00 ± 55.47[12]	384.70 ± 27.80[12]	165.00 ± 29.79[8]**
AFC/10^6 Spleen Cells	630.1 ± 125.8[12]	549.6 ± 176.2[12]	403.1 ± 78.9[12]	422.8 ± 109.6[12]	605.9 ± 91.5[12]	538.0 ± 144.7[12]	413.0 ± 52.3[8]
AFC/Spleen (x10^2)	2031.3 ± 408.2[12]	2208.8 ± 528.6[12]	1815.0 ± 400.5[12]	1835.0 ± 482.4[12]	2596.3 ± 629.6[12]	2137.5 ± 697.0[12]	676.9 ± 128.0[8]*

M07: TDAR SRBC: Spleen AFC

Study Number: I99067
DTTID: 103-002-003-000-9
Study Type: immune screening
Species/Strain: Rat/Harlan Sprague Dawley

Test Compound: Echinacea purpurea extract
CAS Number: 90028-20-9
DTXSID: DTXSID0031265

Date: 06 Jun 2025
Time: 10:52:50 AM

LEGEND

Data are displayed as mean ± SEM (N) unless otherwise noted.

Statistical analysis was performed by Jonckheere (trend) and then a pairwise test. Williams/Dunnett pairwise tests are used for organ weights, Shirley/Dunn pairwise tests are used for all other endpoints. The positive control group (15 mg/kg CPS) was excluded from the trend test.

Statistical analysis for the positive control group (15 mg/kg CPS) compared to the vehicle control group was performed using a t-test for organ weights and a Wilcoxon rank sum test for all other endpoints.

Statistical significance for the control group indicates a significant trend test.

Statistical significance for a treatment group indicates a significant pairwise test compared to the vehicle control group.

* Statistically significant at $p \leq 0.05$

** Statistically significant at $p \leq 0.01$

TDAR = T-Dependent Antibody Response; SRBC = Sheep Red Blood Cells; AFC = Antibody-Forming Cells

SEM = Standard Error of the Mean

SD = Study Day

CPS = Cyclophosphamide

Females from the vehicle control and treatment groups were removed on SD 28.

** END OF REPORT **