

**Study Number:** I11054

**Test Type:** TOX

**Route:** Oral Gavage

**Species/Strain:** Mouse/B6C3F1/N

**C Number:**

I11054

**Study Gender:**

Female

**PWG Approval Date**

See web page for date of PWG Approval

**M06: Spleen Immunophenotyping**

**Test Compound:** Sulfolane

**CAS Number:** 126-33-0

**Date Report Requested:** 09/12/2018

**Time Report Requested:** 10:04:55

**Lab:** Burleson Research Technologies

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	Females						
	Treatment Groups (mg/kg)						
	0	1	10	30	100	300	50 mg/kg CPS
Spleen Cells (x10 <sup>6</sup> )	73.65 ± 6.70 (8)	67.68 ± 3.83 (8)	66.30 ± 5.67 (8)	66.95 ± 4.75 (8)	59.54 ± 2.38 (7)	69.28 ± 6.28 (8)	16.30 ± 1.46 (8) **
Total Lymphocytes	73.135 ± 6.620 (8)	66.947 ± 3.761 (8)	65.328 ± 5.569 (8)	65.650 ± 4.824 (8)	58.215 ± 2.311 (7)	67.953 ± 6.096 (8)	15.876 ± 1.452 (8) **
Total T Cells	23.745 ± 2.342 (8)	19.948 ± 1.191 (8)	19.226 ± 2.148 (8)	20.028 ± 1.904 (8)	18.447 ± 0.845 (7)	21.138 ± 1.981 (8)	7.688 ± 0.718 (8) **
CD4 <sup>+</sup> T Cells <sup>a</sup>	14.192 ± 1.470 (8)	11.678 ± 0.691 (8)	11.372 ± 1.050 (8)	12.152 ± 1.107 (8)	10.642 ± 0.495 (7)	11.930 ± 1.082 (8)	3.874 ± 0.416 (8) **
CD8 <sup>+</sup> T Cells <sup>b</sup>	8.555 ± 0.872 (8)	7.498 ± 0.561 (8)	7.106 ± 0.858 (8)	7.296 ± 0.579 (8)	6.632 ± 0.325 (7)	7.331 ± 0.788 (8)	2.902 ± 0.247 (8) **
B Cells	43.547 ± 3.813 (8)	41.643 ± 2.233 (8)	40.846 ± 3.443 (8)	39.744 ± 2.867 (8)	35.368 ± 1.358 (7)	41.958 ± 3.941 (8)	7.364 ± 0.690 (8) **
NK Cells	1.813 ± 0.139 (8) **	1.692 ± 0.132 (8)	1.410 ± 0.143 (8)	1.639 ± 0.144 (8)	1.332 ± 0.112 (7) *	1.385 ± 0.139 (8) *	0.304 ± 0.028 (8) **
Mono/Mac Cells <sup>c</sup>	1.567 ± 0.191 (6)	1.392 ± 0.108 (8)	1.479 ± 0.148 (8)	1.528 ± 0.104 (7)	1.315 ± 0.066 (7)	1.481 ± 0.179 (8)	0.263 ± 0.029 (8) **
Neutrophils	0.757 ± 0.119 (8)	0.659 ± 0.065 (8)	0.914 ± 0.219 (8)	0.816 ± 0.223 (8)	0.531 ± 0.042 (7)	0.654 ± 0.084 (8)	0.049 ± 0.006 (8) **
Eosinophils	0.402 ± 0.073 (6)	0.279 ± 0.024 (8)	0.327 ± 0.053 (8)	0.310 ± 0.028 (7)	0.226 ± 0.020 (7)	0.277 ± 0.026 (8)	0.064 ± 0.008 (8) **
Total T Cells: B Cells Ratio	0.543 ± 0.019 (8)	0.479 ± 0.011 (8)	0.471 ± 0.029 (8)	0.500 ± 0.019 (8)	0.514 ± 0.010 (8)	0.510 ± 0.026 (8)	1.048 ± 0.028 (8) **
CD4 <sup>+</sup> T Cells: CD8 <sup>+</sup> T Cells Ratio	1.664 ± 0.049 (8)	1.570 ± 0.028 (8)	1.644 ± 0.075 (8)	1.661 ± 0.037 (8)	1.628 ± 0.029 (8)	1.650 ± 0.046 (8)	1.322 ± 0.048 (8) **
Percent Total Lymphocytes	99.334 ± 0.097 (8) **	98.939 ± 0.258 (8)	98.558 ± 0.348 (8)	97.969 ± 0.406 (8) **	97.810 ± 0.523 (8) *	98.150 ± 0.195 (8) **	97.337 ± 0.606 (8) **
Percent Total T Cells	32.320 ± 0.783 (8)	29.771 ± 0.437 (8)	29.260 ± 1.278 (8)	30.263 ± 0.987 (8)	31.305 ± 0.522 (8)	31.229 ± 1.151 (8)	48.431 ± 0.767 (8) **
Percent CD4 <sup>+</sup> T Cells <sup>a</sup>	59.649 ± 0.966 (8)	58.578 ± 0.428 (8)	59.946 ± 1.557 (8)	61.089 ± 1.714 (8)	57.820 ± 0.645 (8)	56.640 ± 0.990 (8)	50.025 ± 1.009 (8) **
Percent CD8 <sup>+</sup> T Cells <sup>b</sup>	35.955 ± 0.622 (8)	37.371 ± 0.582 (8)	36.694 ± 0.863 (8)	36.864 ± 1.123 (8)	35.564 ± 0.572 (8)	34.474 ± 0.911 (8)	37.994 ± 0.682 (8) *
Percent B Cells	59.713 ± 0.756 (8)	62.281 ± 0.538 (8) *	62.561 ± 1.237 (8)	60.584 ± 0.523 (8)	60.908 ± 0.250 (8)	61.629 ± 1.015 (8)	46.316 ± 0.544 (8) **
Percent NK Cells	2.508 ± 0.090 (8) **	2.514 ± 0.102 (8)	2.208 ± 0.191 (8)	2.489 ± 0.095 (8)	2.282 ± 0.136 (8)	2.032 ± 0.079 (8) **	1.924 ± 0.061 (8) **
Percent Mono/Mac Cells <sup>c</sup>	2.119 ± 0.089 (6)	2.044 ± 0.075 (8)	2.238 ± 0.138 (8)	2.293 ± 0.198 (7)	2.317 ± 0.145 (8)	2.114 ± 0.130 (8)	1.641 ± 0.163 (8) *
Percent Neutrophils	0.998 ± 0.087 (8)	0.965 ± 0.062 (8)	1.396 ± 0.321 (8)	1.285 ± 0.398 (8)	1.005 ± 0.124 (8)	0.953 ± 0.091 (8)	0.300 ± 0.026 (8) **
Percent Eosinophils	0.531 ± 0.061 (6)	0.422 ± 0.040 (8)	0.494 ± 0.070 (8)	0.455 ± 0.024 (7)	0.396 ± 0.032 (8)	0.416 ± 0.047 (8)	0.420 ± 0.073 (8)

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#### LEGEND

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Data are displayed as mean  $\pm$  SEM (N) unless otherwise noted.

<sup>a</sup>Helper/DTH - T Cell

<sup>b</sup>Cytotoxic T Cell

<sup>c</sup>Monocytes/Macrophage

All units are per  $10^6$  spleen cells unless otherwise noted

Statistical analysis performed by Jonckheere (trend) and Shirley or Dunn (pairwise) tests (unless otherwise noted).

Statistical analysis for the positive control group compared to the vehicle control group was performed using the Kruskal-Wallis test.

\* Statistically significant at  $P \leq 0.05$

\*\* Statistically significant at  $P \leq 0.01$

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

Decrease in N for Mono/Mac Cells and Eosinophils in the 0 mg/kg dose group is due to two animals' values being excluded because they were outliers. Decrease in N for Mono/Mac Cells and Eosinophils in the 30 mg/kg dose group is due to one animal's value being excluded because it was an outlier.

Decrease in N for Spleen Cells in the 100 mg/kg dose group is due to one animal's value being excluded because it was an outlier.

CPS = Cyclophosphamide

**\*\* END OF REPORT \*\***