

Table 4 Spleen cell immunophenotyping in female B6C3F1/N mice exposed to gum guggul extract via oral gavage daily for 28 days

Treatment	Spleen Cells	Ig+	CD3+	CD4+CD8-	CD4-CD8+	CD4+CD8+	NK1.1+CD3-	Mac3+
<i>Absolute Values (x10⁶)</i>								
Vehicle	140.2 ± 5.5	75.0 ± 3.4	44.4 ± 1.6	29.7 ± 1.3	13.7 ± 0.5	0.2 ± 0.0	5.1 ± 0.3	4.8 ± 0.3
GGE								
31.25 mg/kg	154.6 ± 9.5	84.1 ± 4.8	44.4 ± 2.0	29.9 ± 1.2	14.0 ± 0.7	0.1 ± 0.0	5.3 ± 0.3	4.6 ± 0.4
62.50 mg/kg	156.2 ± 3.8	84.5 ± 2.1	44.4 ± 0.8	28.9 ± 0.8	13.5 ± 0.4	0.1 ± 0.0	5.6 ± 0.3	4.5 ± 0.3
125 mg/kg	150.3 ± 7.9	77.1 ± 4.1	45.5 ± 1.7	30.0 ± 1.4	14.8 ± 0.7	0.2 ± 0.0	6.3 ± 0.4	4.4 ± 0.3
25 mg/kg	138.9 ± 5.6	68.8 ± 2.7	42.1 ± 1.3	27.0 ± 0.9	14.3 ± 0.8	0.2 ± 0.0	5.9 ± 0.2	4.6 ± 0.2
500 mg/kg	154.8 ± 10.6	81.4 ± 5.1	44.4 ± 2.7	29.4 ± 2.1	13.8 ± 0.9	0.2 ± 0.0	5.5 ± 0.4	4.8 ± 0.4
CPS (50mg/kg)	54.0 ± 4.2**	9.8 ± 1.9**	28.5 ± 2.3**	7.8 ± 1.3**	9.9 ± 0.7**	0.1 ± 0.0	1.3 ± 0.1**	3.2 ± 0.4*
AAGM1 (1:10)	162.4 ± 13.5	NA	46.2 ± 2.9	NA	NA	NA	0.9 ± 0.1**	NA
Trend Analysis	0.632	0.678	0.652	0.376	0.427	0.392	0.089	0.957
<i>Percent Values</i>								
Vehicle		53.4 ± 0.7	31.8 ± 1.2	21.3 ± 0.8	9.9 ± 0.5	0.1 ± 0.0	3.7 ± 0.2	3.4 ± 0.1
GGE								
31.25 mg/kg		54.5 ± 0.8	29.0 ± 0.9	19.6 ± 0.7	9.1 ± 0.3	0.1 ± 0.0	3.5 ± 0.2	3.0 ± 0.3
62.50 mg/kg		54.2 ± 0.6	28.5 ± 0.7	18.6 ± 0.5	8.7 ± 0.3	0.1 ± 0.0	3.6 ± 0.1	2.9 ± 0.2
125 mg/kg		51.3 ± 0.7	30.5 ± 0.8	20.0 ± 0.5	9.9 ± 0.5	0.1 ± 0.0	4.2 ± 0.1	2.9 ± 0.1
25 mg/kg		49.6 ± 1.4	30.4 ± 0.8	19.5 ± 0.6	10.3 ± 0.5	0.1 ± 0.0	4.2 ± 0.1	3.3 ± 0.2
500 mg/kg		52.7 ± 0.8	28.9 ± 0.9	19.1 ± 0.8	8.9 ± 0.3	0.1 ± 0.0	3.6 ± 0.2	3.1 ± 0.2
CPS (50mg/kg)		36.5 ± 1.3**	52.9 ± 1.3**	33.2 ± 0.9**	18.6 ± 0.7**	0.1 ± 0.0	2.5 ± 0.1**	5.8 ± 0.4**
AAGM1 (1:10)		28.9 ± 1.0	NA	NA	NA	NA	0.5 ± 0.0**	NA
Trend Analysis		0.018	0.437	0.181	0.964	0.717	0.073	0.906

Values represent the mean (± SE) from 8 animals per group; *p < 0.05; **p ≤ 0.01; NA = Not Applicable

Ig + = B-cell; CD3+ = T-cell; CD4+CD8- = Helper T-cell; CD4-CD8+ = Cytotoxic T-cell; CD4+CD8+ = immature T-cell; NK1.1+CD3 = Natural Killer Cell; Mac3+ = Macrophage

GGE, Gugulipid® Lot # G51177/H, ~2.45% total guggulsterone content. CPS, Cyclophosphamide positive control; AAGM1, Rabbit Anti-Asialo GM1 antibody positive control

Bolded entries indicate GGE-exposed groups that differ significantly from the vehicle controls or significant trends across GGE-exposed groups and vehicle controls.