TABLE 2. Rickettsial growth and L929 cell growth in untreated and IFN-γ-treated cultures of standard L929 cells infected with rickettsiae isolated from persistently infected, IFN-γ-treated L929 cells

| Rickettsial strain | Cell treatment after infection | Interval (days) | No. of expts | Growth[a] (no. of doublings/day, mean ± SEM) | | Rickettsial infection at end of interval[c] | |
|---|---|---|---|---|---|---|---|
| | | | | L929 cells | Rickettsiae[b] | %R (mean ± SEM) | RI (mean ± SEM) |
| Madrid E | NA[d] | 0 | 6 | | | 60 ± 8 | 3.6 ± 0.4 |
| | None (control) | 0–3 | 6 | 0.9 ± 0.1 | 2.1 ± 0.1 | 78 ± 9 | 35 ± 3 |
| | IFN-γ | 0–3 | 6 | 0.5 ± 0.1** | 0.8 ± 0.1** | 33 ± 5 | 10 ± 1 |
| | IFN-γ | 3–7 | 6 | 0.6 ± 0.0 | ND[e] | 14 ± 2 | 8 ± 1 |
| 427 | NA | 0 | 4 | | | 38 ± 7 | 2.3 ± 0.3 |
| | None (control) | 0–3 | 4 | 0.7 ± 0.1 | 2.5 ± 0.2 | 95 ± 3 | 39 ± 8 |
| | IFN-γ | 0–3 | 4 | 0.4 ± 0.1* | 2.0 ± 0.1*‡‡‡ | 91 ± 4 | 25 ± 3 |
| | IFN-γ | 3–7 | 4 | 0.1 ± 0.1†† | ND | 98 ± 1 | 51 ± 6 |
| 427-19 | NA | 0 | 2 | | | 49 ± 4 | 2.4 ± 0.2 |
| | None (control) | 0–3 | 2 | 0.6 ± 0.0 | 2.5 ± 0.1 | 99 ± 1 | 64 ± 3 |
| | IFN-γ | 0–3 | 2 | 0.3 ± 0.1 | 1.9 ± 0.1**‡‡‡ | 98 ± 0 | 38 ± 1 |
| | IFN-γ | 3–7 | 2 | 0.2 ± 0.1†† | ND | 87 ± 7 | 32 ± 5 |
| 87 | NA | 0 | 4 | | | 76 ± 3 | 3.9 ± 0.7 |
| | None (control) | 0–3 | 4 | 0.7 ± 0.1 | 2.3 ± 0.1 | 100 ± 0 | 74 ± 3 |
| | IFN-γ | 0–3 | 4 | 0.3 ± 0.1** | 1.3 ± 0.2**‡ | 93 ± 2 | 20 ± 3 |
| | IFN-γ | 3–7 | 4 | 0.3 ± 0.1†† | ND | 93 ± 5 | 44 ± 7 |
| 87-17 | NA | 0 | 2 | | | 67 ± 1 | 3.4 ± 0.1 |
| | None (control) | 0–3 | 2 | 0.6 ± 0.0 | 2.3 ± 0.0 | 100 ± 0 | 81 ± 1 |
| | IFN-γ | 0–3 | 2 | 0.5 ± 0.0** | 1.8 ± 0.1**‡‡‡ | 99 ± 1 | 45 ± 5 |
| | IFN-γ | 3–7 | 2 | 0.3 ± 0.1†† | ND | 98 ± 1 | 53 ± 9 |

[a] For the time interval beginning on day 0 and ending on day 3, a significant difference between IFN-γ-treated cultures and untreated control cultures infected with the same rickettsial strain is indicated by ** ($P \leq 0.05$) or * ($0.05 < P \leq 0.1$) and a significant difference between IFN-γ-treated cultures infected with *R. prowazekii* Madrid E and IFN-γ-treated cultures infected with rickettsiae isolated from persistently infected, IFN-γ-treated L929 cells is indicated by ‡‡‡ ($P \leq 0.005$) or ‡ ($0.05 < P \leq 0.1$). For the time interval beginning on day 3 and ending on day 7, a significant difference between IFN-γ-treated cultures infected with *R. prowazekii* Madrid E and IFN-γ-treated cultures infected with rickettsiae isolated from persistently infected, IFN-γ-treated L929 cells is indicated by †† ($P \leq 0.05$).

[b] In each instance, the number of rickettsial doublings that occurred between days 0 and 3 was calculated from the number of rickettsiae present in the L929 cells that were planted on day 0 and the number of rickettsiae per culture on day 3. The number of rickettsiae per culture on day 3 was calculated by adding the number of rickettsiae in the detached cells to the number of rickettsiae in the attached cells.

[c] %R (percentage of cells infected) and RI (average number of rickettsiae per infected cell) for the intervals ending on days 3 and 7 represent the attached cells only.

[d] NA, Not applicable.

[e] ND, Not determined.