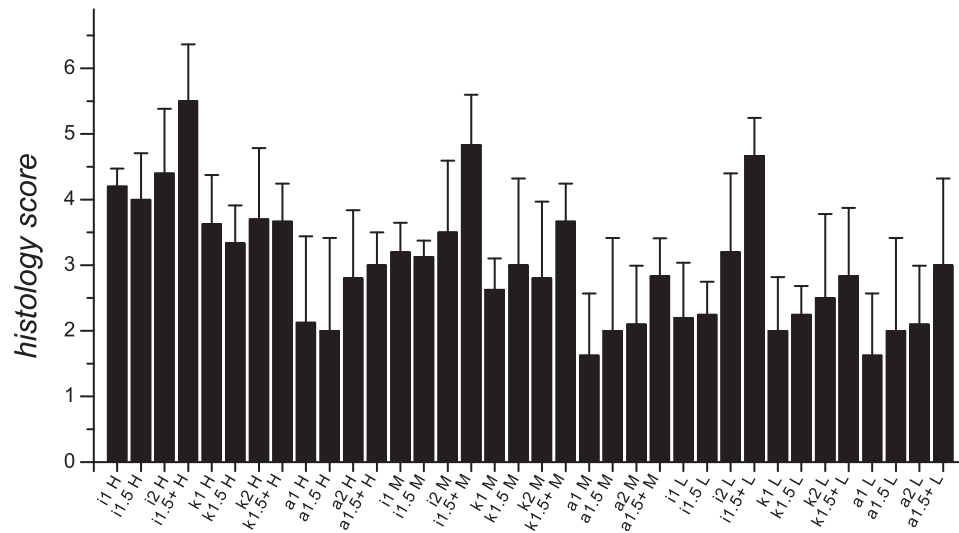
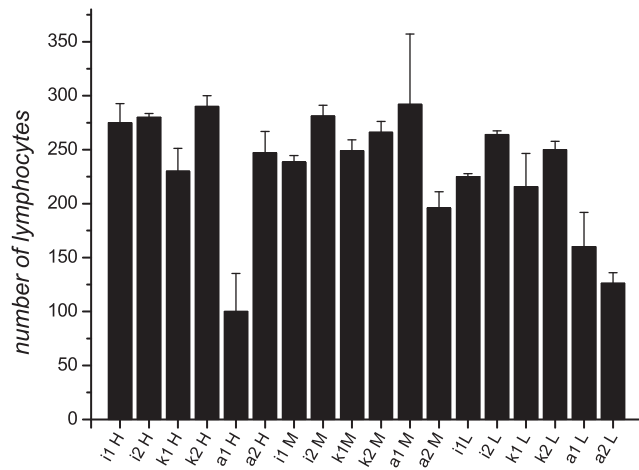


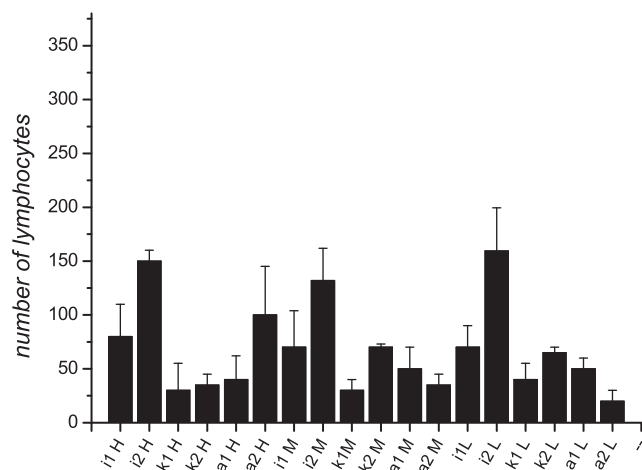
SUPPLEMENTARY FIG. S2. Histology scores attributed to the histology cuts performed to the tissue around the implanted chips after 24 h of implantation (average value + standard deviation [SD], $n \geq 4$). The conditions are abbreviated according to: A, Alg; k, k-Carr; ι , ι -Carr. The percentage of chi is indicated with 1, 1.5, 2, and 1.5+ for 1%, 1.5%, 2%, and 1.5+%, respectively. The dilutions of polymer B are indicated according to the nomenclature adopted in the article. Alg, alginate; Chi, chitosan; k-Carr, k-carrageenan; ι -Carr, ι -carrageenan.



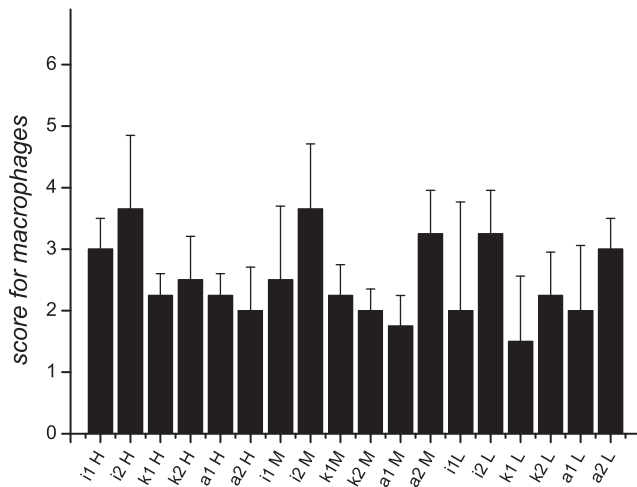
SUPPLEMENTARY FIG. S3. Histology scores attributed to the histology cuts performed to the tissue around the implanted chips after 7 days of implantation (average value+SD, $n \geq 4$). The conditions are abbreviated according to: A, Alg; k, k-Carr; i, i-Carr. The percentage of Chi is indicated with 1, 1.5, 2, and 1.5+ for 1%, 1.5%, 2%, and 1.5+%, respectively. The dilutions of polymer B are indicated according to the nomenclature adopted in the article.



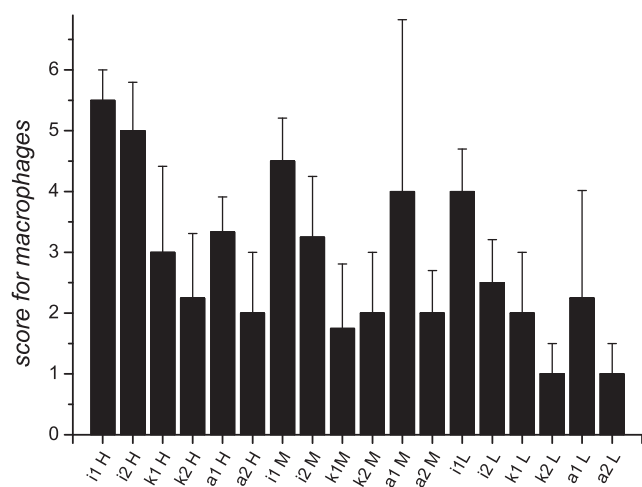
SUPPLEMENTARY FIG. S4. Quantification of lymphocytes on-chip (cells/100×100 pixel²) after 24 h of implantation. Bars indicate the cell number average value + SD ($n \geq 4$). The conditions are abbreviated according to: A, Alg; k, k-Carr; ι , ι -Carr. The percentage of Chi is indicated with 1, 1.5, 2, and 1.5+ for 1%, 1.5%, 2%, and 1.5+%, respectively. The dilutions of polymer B are indicated according to the nomenclature adopted in the article.



SUPPLEMENTARY FIG. S5. Quantification of lymphocytes on-chip (cells/100×100 pixel²) after 7 days of implantation. Bars indicate the cell number average value + SD ($n \geq 4$). The conditions are abbreviated according to: A, Alg; k, k-Carr; i, i-Carr. The percentage of Chi is indicated with 1, 1.5, 2, and 1.5+ for 1%, 1.5%, 2%, and 1.5+%, respectively. The dilutions of polymer B are indicated according to the nomenclature adopted in the article.



SUPPLEMENTARY FIG. S6. Score attributed to on-chip immunocytochemistry images of macrophages after 24 h of implantation. Bars indicate the score average value + SD ($n \geq 4$). The conditions are abbreviated according to: A, Alg; k, k-Carr; ι , ι -Carr. The percentage of Chi is indicated with 1, 1.5, 2, and 1.5+ for 1%, 1.5%, 2%, and 1.5+%, respectively. The dilutions of polymer B are indicated according to the nomenclature adopted in the article.



SUPPLEMENTARY FIG. S7. Score attributed to on-chip immunocytochemistry images of macrophages after 7 days of implantation. Bars indicate the score average value + SD ($n \geq 4$). The conditions are abbreviated according to: A, Alg; k, k-Carr; i, i-Carr. The percentage of Chi is indicated with 1, 1.5, 2, and 1.5+ for 1%, 1.5%, 2%, and 1.5+ %, respectively. The dilutions of polymer B are indicated according to the nomenclature adopted in the article.