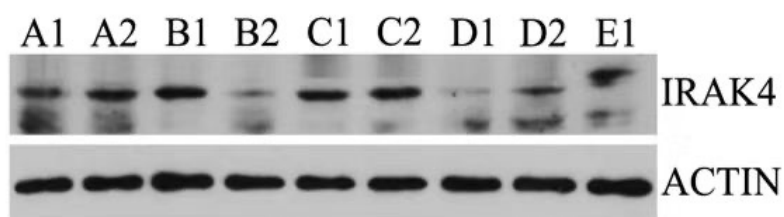


Supplementary material 4:



Supplementary figure 2. Western blotting was used to screen out the effective IRAK4i-introducing method among various administration alternatives *in vivo*.

A1: Control-SLA group, SLA implant was injected with PBS (100 μ l) at the same time of implantation.

A2: Soaking-SLA group, SLA implant was soaked in IRAK4i solution before implantation.

B1: Dropping-SLA group, SLA implant was dropped with IRAK4i (2500 nM, 100 μ l) at the same time of implantation.

B2: Dropping-polished titanium (PT, without screw) group, PT implant was dropped with IRAK4i (2500 nM, 100 μ l) at the same time of implantation.

C1: 100 μ l inhibitor-SLA group, SLA implant was inserted after injecting with IRAK4i (2500 nM, 100 μ l) within bone marrow at the implant sites.

C2: 100 μ l inhibitor-PT group, PT implant was inserted after injecting with IRAK4i (2500 nM, 100 μ l) within bone marrow at the implant sites.

D1: Subperiosteal 100 μ l inhibitor-SLA group, SLA implant was inserted after injecting with IRAK4i (2500 nM, 100 μ l) subperiosteally at the implant sites for 3 consecutive days.

D2: Subperiosteal 100 μ l inhibitor-PT group, PT implant was inserted after injecting with IRAK4i (2500 nM, 100 μ l) subperiosteally at the implant sites for 3 consecutive days.

E1: Non-implant group.