**Supplementary Materials and Methods**

***Peptide, cytokines and chemicals***

The ovalbumin (OVA) 257-264 epitope (SIINFEKL) restricted to H-2Kb was commercially synthesized and supplied at >90% purity (Wako, Osaka, Japan). Recombinant mouse interleukin (IL)-2, IL-4 and human macrophage colony stimulating factor (M-CSF) were purchased from Peprotec (London, UK). Recombinant mouse granulocyte macrophage colony stimulating factor (GM-CSF) was purchased from Prospec (Rehovot, Israel). Lipopolysaccharide (LPS) from *Escherichia coli* (serotype 011B4) was purchased from Sigma-Aldrich (St. Louis, MO). Penicillin-killed *Streptococcus pyogenes* (OK432) was purchased from Chugai Pharmaceutical (Tokyo, Japan).

***Cell proliferation***

For enumeration, the cells were cultured in a 24-well plate at 5.0 × 104 /well and enumerated at each time point. For the MTT assay, the cells were seeded in 96-well culture plates (2.0 × 103/well). At each time point, MTT reagent was added directly to the medium and incubated for 4 h. The supernatant was removed, and 200 l of dimethyl sulfoxide were added to each well and thoroughly mixed for 3 min. The spectrometric absorbance of converted dye at 570 nm was measured on a Multiskan FC microplate photometer (Thermo Scientific, Vantaa, Finland). For [3H]-thymidine incorporation assays, the cells were cultured in 96-well culture plates (2.0 × 103/well) for 4 days and 37 kBq/well [3H]-methylthymidine was added to the culture for the last 16 h. The incorporated radioactivity was measured by scintillation counting (MicroBeta2 LumiJET, PerkinElmer, Waltham, Massachusetts).

***Generation of DCs from bone marrow cells***

DCs were obtained from bone marrow precursors as described previously (**9**). Briefly, bone marrow cells were cultured in RPMI-1640 supplemented with 10% FBS, 20 ng/ml GM-CSF, 100 U/ml penicillin, 100 g/ml streptomycin and 50 M 2-ME for seven days in Petri dishes. GM-CSF was added to the culture on days three and six.

***Flow cytometry antibodies***

The following monoclonal antibodies (mAb) conjugated with fluorescein isothiocyanate, phycoerythrin, or allophycocyanin were purchased from BD Biosciences (San Jose, CA), BioLegend (San Diego, CA) or Affymetrix eBioscience (San Diego, CA) and used for cell staining: anti-B220 (RA3-6B2, Rat IgG2a), anti-DEC205 (205yekta, Rat IgG2a), anti-CD11b (M1/70, Rat IgG2b), anti-CD11c (N418, Armenian Hamster IgG), anti-Gr-1 (RB6-8C5, Rat IgG2b), anti-H-2Kb/H-2Db (2-8-6, mouse (C3H) IgG2a), anti-MHC-II (M5/114.15.2, Rat IgG2b), anti-CD40 (1C10, Rat IgG2a), anti-CD80 (16-10A1, Armenian Hamster IgG), and anti-CD86 (GL1, Rat IgG2a). Rat IgG2a (eBR2a), Rat IgG2b (eB149/10H5), BALB/c IgG2a (G155-178) mouse IgG2a (MOPC-173), and Armenian Hamster IgG (eBio299Arm) were used as isotype-matched controls.

***Mixed lymphocyte reaction (MLR)***

Splenic mononuclear cells were prepared from unprimed female BALB/c mice, and T cells were isolated from the splenic mononuclear cells using negative magnetic cell sorting with the Pan T cell isolation kit II (Miltenyi Biotec). These cells were then used as responders. Graded numbers of stimulator cells were X-ray irradiated (35 Gy) and cultured with responder cells (1.5 × 105/well) in individual wells of 96-well round-bottomed culture plates, and were cultured for six days. A concentration of 37 kBq/well [3H]-methylthymidine was added to the culture for the last 16 h. The incorporated radioactivity was measured by scintillation counting (MicroBeta2 LumiJET).