



S5 Fig. *In vivo* adaptation of *P. falciparum* K1 strain in NSG mice supplemented with human RBCs. NSG mice (M1 and M2) are supplemented daily with human RBCs by intraperitoneal injection. Antibodies to glycoprotein a/b (conjugated to FITC) was used to stain the human RBCs for quantification. When human RBC reconstitution reaches about 20% (on day 9 as shown above), NSG mice were infected with 2×10^7 ring stage parasites of *P. falciparum* K1 strain. The supplementation of human RBCs was continued throughout the experiment and an increase in human RBC reconstitution up to 89% could be seen in M1 on day 28. 48h after infection with the parasite, a parasitemia level of 2% was detected. Later on parasitemia, however, decreased to undetectable levels. 16 days after infection parasitemia became detectable by microscopy again and reached 2% by day 20. This adapted *P. falciparum* K1 strain named SMG01 was used for further studies.