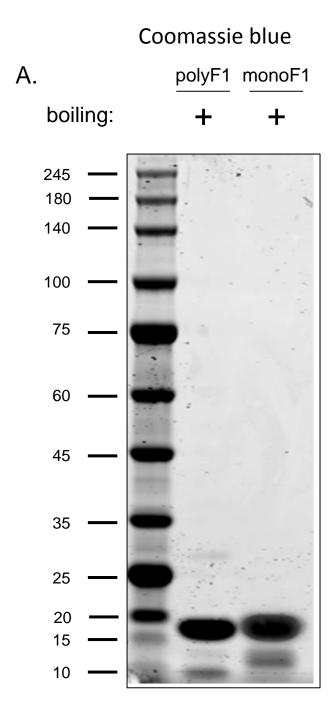
Figure S1



## Western blot

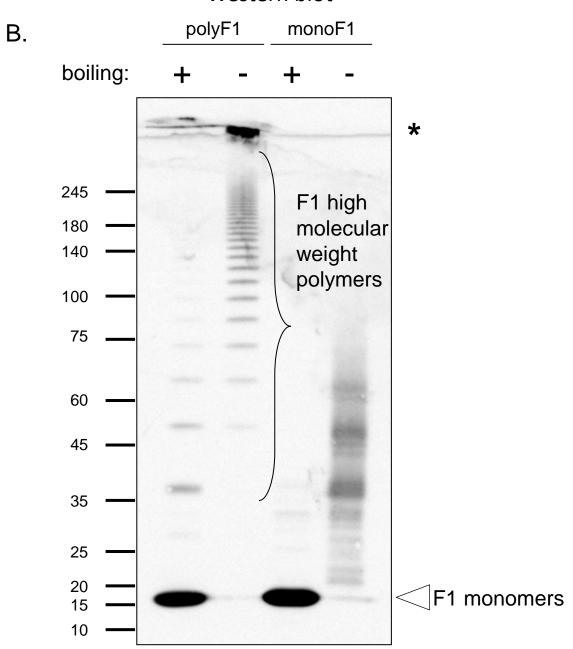


Figure S2

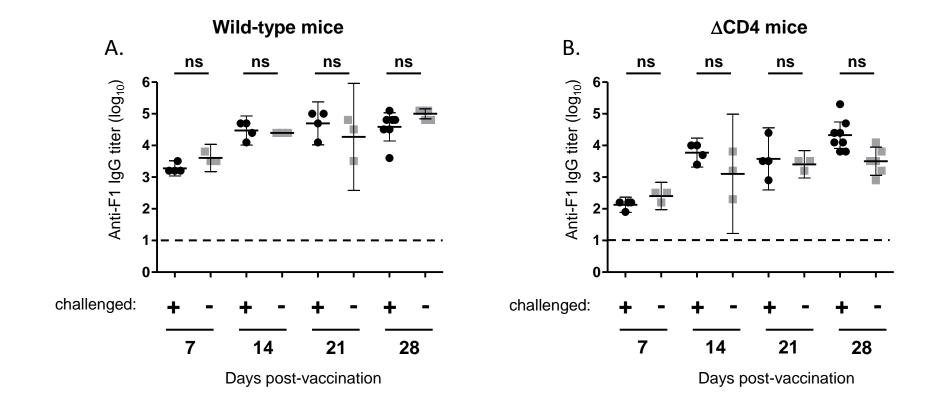
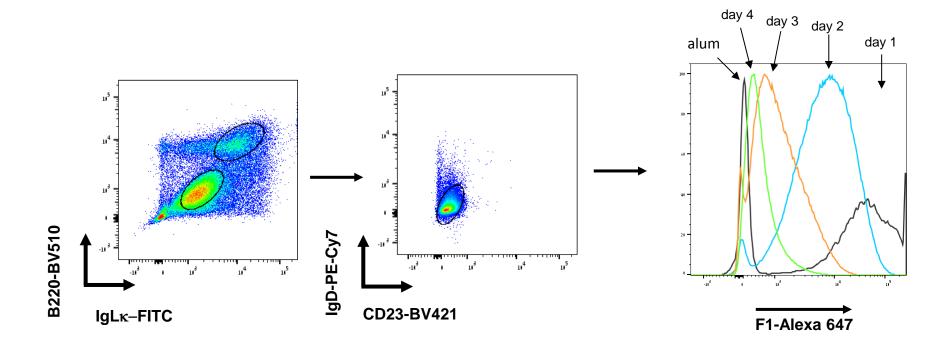


Figure S3



## Figure S1. SDS-PAGE analyses of polymeric F1 and monomeric F1.

A) Coomassie blue staining of equal amounts of polymeric F1 (polyF1) and monomeric F1 (monoF1) resolved by 4-16% SDS-PAGE after boiling. B) Western blot analysis using rabbit anti-F1 antibodies (diluted 1:250,000) of polyF1 and monoF1 resolved by 4-12% SDS-PAGE with or without boiling. F1 monomers and F1 high-molecular weight polymers are indicated. Without boiling the majority of polyF1 does not resolve in the gel (marked by an asterisk). Molecular weight markers in kilodalton are shown on the left.

The Coomassie blue stained gel and the blot derives from the same experiment and were processed in parallel.

## Figure S2. Anti-F1 IgG titer development in vaccinated mice, with or without a lethal challenge.

Anti-F1 IgG titers measured in the sera of wild-type C57BL/6J mice (A) and  $\Delta$ CD4 mice (B) at the indicated day post vaccination with 80µg/mouse polymeric F1 alone (gray squares, n=3 for each of the time points in both mice strain groups, except for day 28 on which n=6 for both groups), or also following a subcutaneous challenge with  $100\text{LD}_{50}$  of *Y. pestis* Kim53 on day 7 post-vaccination (black circles, n=4 for each of the time points in both mice strain groups, except for day 28 on which n=7 and n=8 in the wild-type and  $\Delta$ CD4 groups, respectively). Short horizontal lines mark the GMT (±95%CI). Horizontal dashed line indicates the limit of detection. (ns = nonsignificant).

## Figure S3. Kinetics of F1 association with peritoneal B1b cells.

Representative dot plot and histogram analyses of gated cells extracted from the peritoneal cavity of C57BL/6 mice vaccinated with the adjuvant (n=3) or with the labeled F1 (n=3). The black line marks the staining of F1 associated with a mixture (1:1 ratio) of B220<sup>mid</sup>IgLk<sup>mid</sup>IgD<sup>-</sup>CD23<sup>-</sup> (B1) cells extracted from control or from F1-vaccinated mice, one day post vaccination. Left peak marks negative staining (alum), and right peak marks positive staining at this time point. Magenta, orange and green lines mark F1 staining in B220<sup>mid</sup>IgLk<sup>mid</sup>IgD<sup>-</sup>CD23<sup>-</sup> (B1) cells extracted from F1-vaccinated mice at two, three and four days post vaccination, respectively.