Supplemental Data

Figure S1: SP-D binds eluate containing ovomucin and ovomacroglobulin, but not purified OVA.

A. SP-D binds early eluting fractions of the separation of OVA preparations. OVA (500 µg, grade III) was separated on a Superose 6 size exclusion column (—, A_{280} nm). Fractions from the separation (samples from every 0.5 ml of eluate) were coated on ELISA plates and SP-D binding in the presence of calcium (5 mM) was tested. SP-D binds (●, A_{450} nm) well to early eluting fractions containing high molecular weight proteins (under line 1) but not to the fractions containing purified OVA (under line 2).

B. High molecular weight proteins present in the in the first peaks are identified as ovomucin (OMu, 234 kDa) and ovomacroglobulin (OM, 166 kDa) by mass spectrometry (MS; MALDI-ToF). Later eluting proteins are identified as ovotransferrin (OT; 76 kDa) and ovalbumin (OVA, 43 kDa). Samples for gel 1 and gel 2 were taken from the peaks highlighted under the line 1 and line 2 of panel A, respectively.

C. A fraction of OVA from the Superose 6 purification (panel A, 15.8 ml) was further purified on a MonoQ ion exchange column. Coomassie blue stained SDS-PAGE gel shows BSA (lane 1), original OVA (lane 2) and the highly purified OVA (lane 3).

D. ELISA-style binding assay shows that SP-D does not bind purified OVA shown in panel **C,** lane 3. SP-D binds well to partially purified OVA and mannan compared to both BSA and pure OVA (*$p<0.01$). These results (Fig. S1) are representative of one of the four experiments.