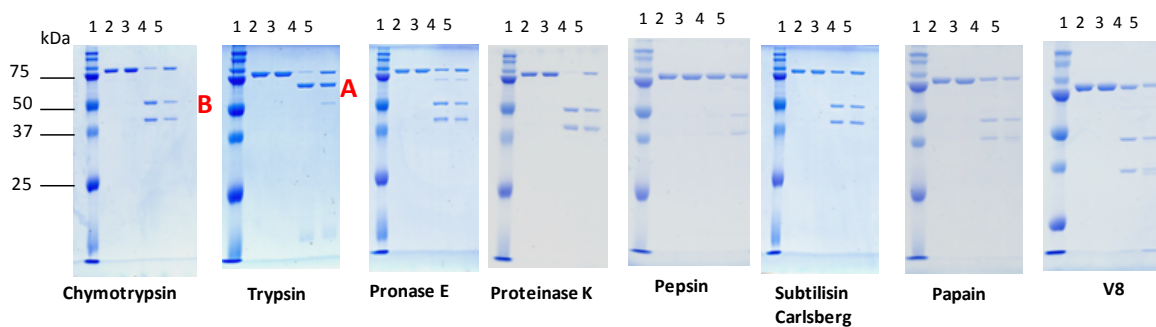


Figure S1: SDS PAGE of desorbed rPA₈₃ from Alhydrogel® . Lane 2 shows the rPA83 before alhydrogel addition. A sample of supernatant after binding would be empty. Lane 3 shows the amount of rPA83 desorbed into the supernatant by high phosphate concentration treatment (see text). As can be seen it is possible to obtain full recovery of rPA83 by this method.

Proteolytic enzymes target similar sites



Lane 1 = Molecular weight marker, Lane 2 = rPA, Lane 3 = rPA recovered from Adjuvant

Lane 4 = rPA cleaved in solution, Lane 5 = rPA cleaved when bound to Adjuvant

Figure S2: Proteolytic cleavage patterns of free and adsorbed rPA₈₃ see below for the sites A and B

Protective Antigen

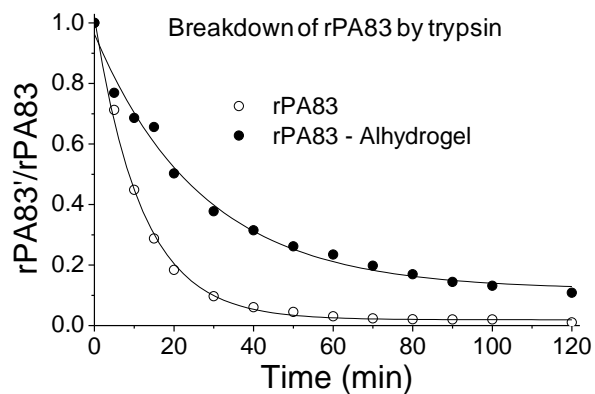
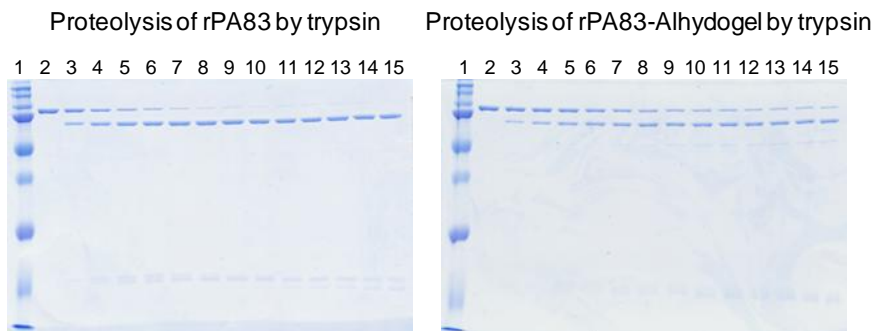
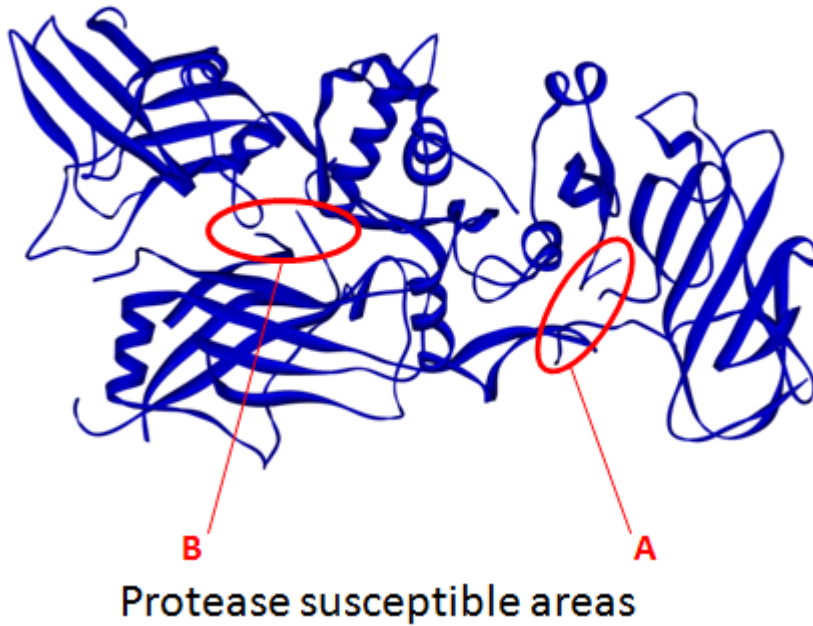


Figure S3: Time course: proteolysis of soluble and adsorbed rPA₈₃ by trypsin. Lanes: 1) molecular weight marker, 2) time = 0, 3) time = 5 min, 4) time = 10 min, 5) time = 15 min, 6) time = 20 min, 7) time = 30 min, 8) time = 40 min, 9) time = 50 min, 10) time = 60 min, 11) time = 70 min, 12) time = 80 min, 13) time = 90 min, 14) time = 100 min, 15) time = 120 min.

Y-axis: rPA83 = optical density of rPA83 band at time = 0, rPA83' = optical density of rPA83 band at time = X. Breakdown rate of soluble rPA83 is quicker than breakdown rate of adsorbed rPA83.

Proteolysis of rPA83 by chymotrypsin Proteolysis of rPA83-Alhydrogel by chymotrypsin

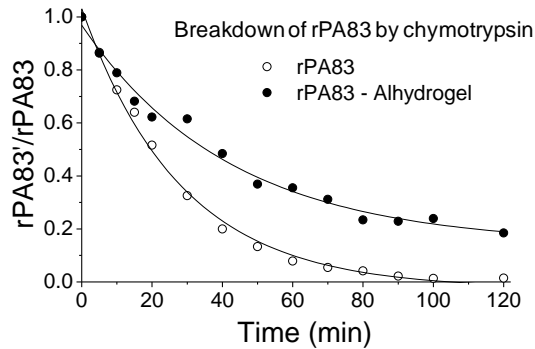
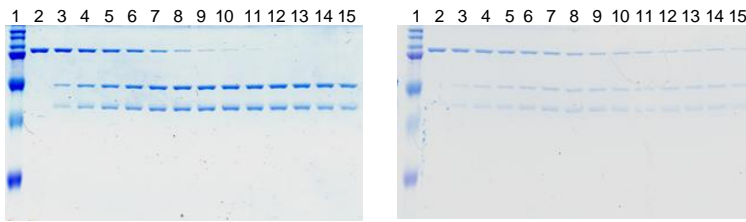


Figure S4: Time course: proteolysis of soluble and adsorbed rPA₈₃ by chymotrypsin.

Lanes: 1) molecular weight marker, 2) time = 0, 3) time = 5 min, 4) time = 10 min, 5) time = 15 min, 6) time = 20 min, 7) time = 30 min, 8) time = 40 min, 9) time = 50 min, 10) time = 60 min, 11) time = 70 min, 12) time = 80 min, 13) time = 90 min, 14) time = 100 min, 15) time = 120 min.

Y-axis: rPA83 = optical density of rPA83 band at time = 0, rPA83' = optical density of rPA83 band at time = X. Breakdown rate of soluble rPA83 is quicker than breakdown rate of adsorbed rPA83.

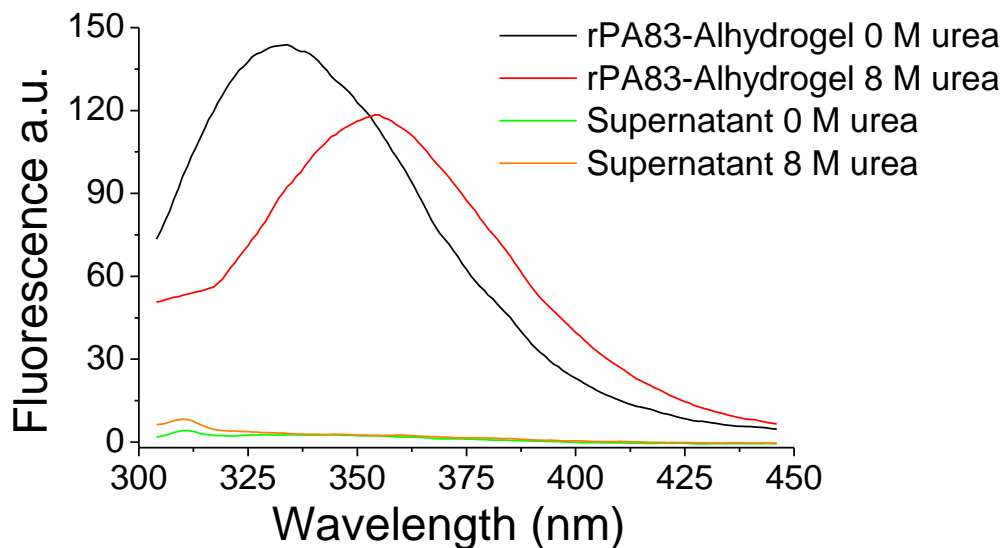


Figure S5: Tryptophan fluorescence emission of rPA83-Alhydrogel samples in 0 M urea, 8 M urea and corresponding supernatants. Non-fluorescent supernatants indicate that rPA83 and Alhydrogel do not dissociate in urea.