

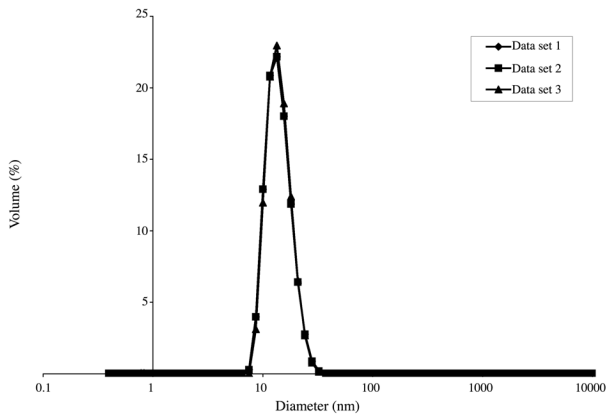
SUPPORTING DATA AVAILABLE

Fig. 1. Dynamic Light Scattering data to illustrate the consistency of the recombinant wild type α B-crystallin.

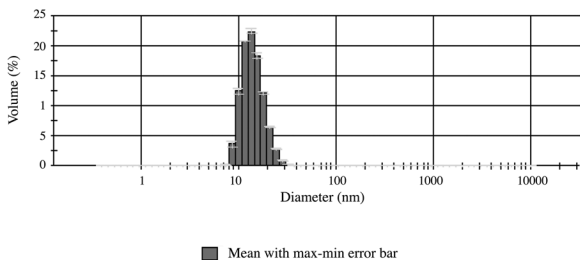
Fig. 2. Native gel electrophoresis illustrating the difference in relative mobility for wild type, Q151X/ wild type and Q151X α B-crystallin. These data further highlight the effect of the Q151X mutation upon the ability of α B-crystallin to form oligomeric complexes.

Fig. 3 and 4. Complete data set for the Citrate synthase (Fig. 3) and Insulin (Fig. 4) chaperone assay. See legend in Fig. 6 and Materials and Methods for experimental details.

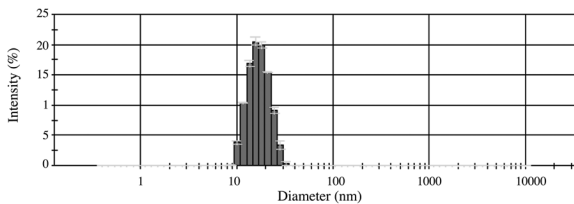
A

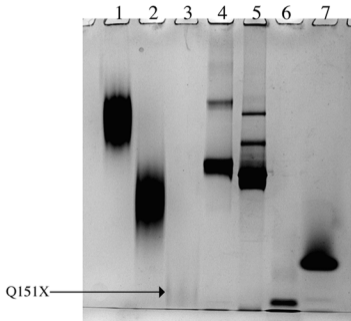


B



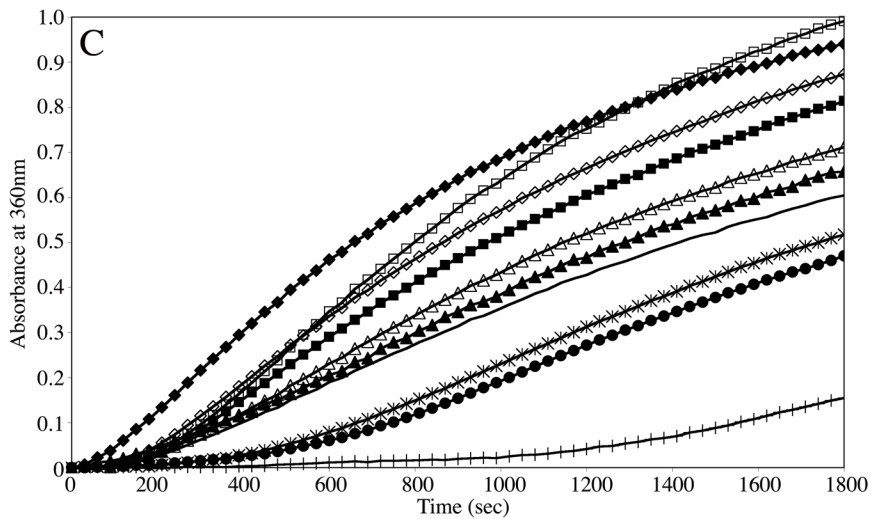
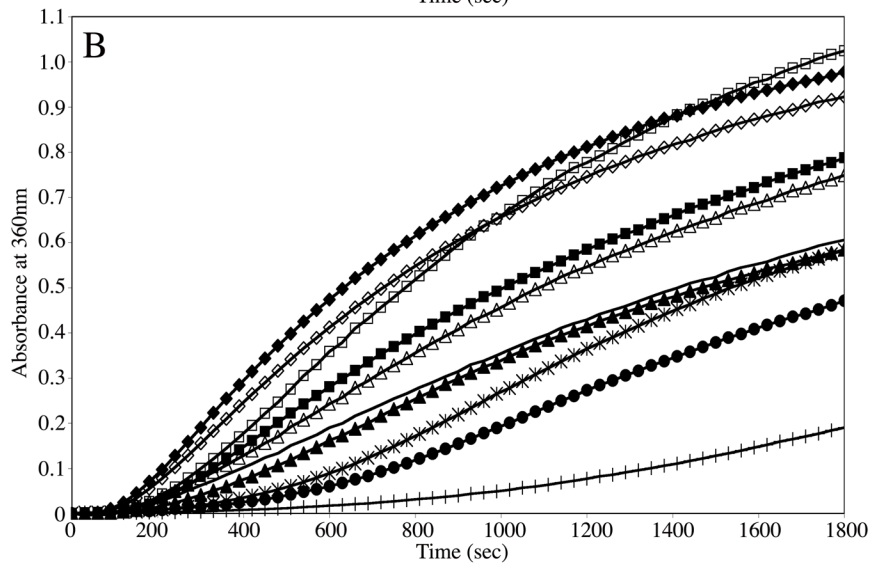
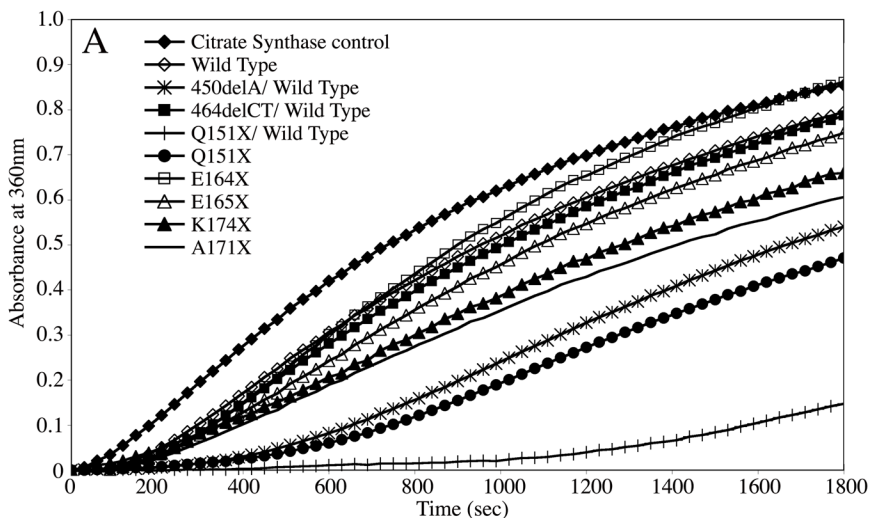
C





Lane	Sample Details	Molecular Weight (kDa)
1	Wild Type α B-crystallin	564
2	Q151X/ Wild Type α B-crystallin	442
3	Q151X	18
4	Thyroglobulin	725
5	GroEL	700
6	BSA	62
7	Carbonic anhydrase	29

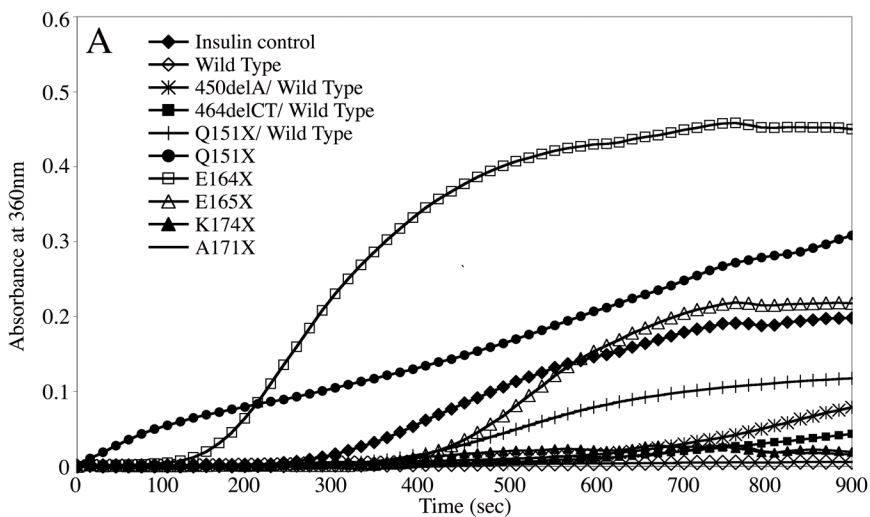
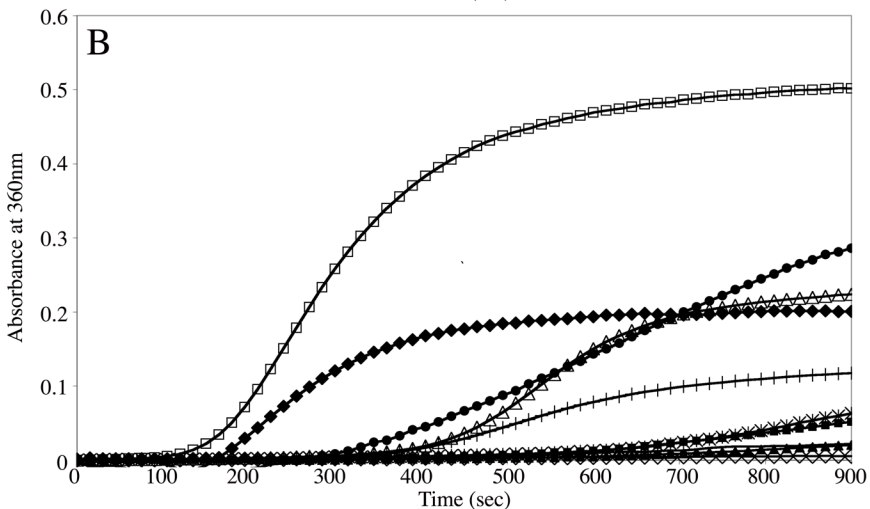
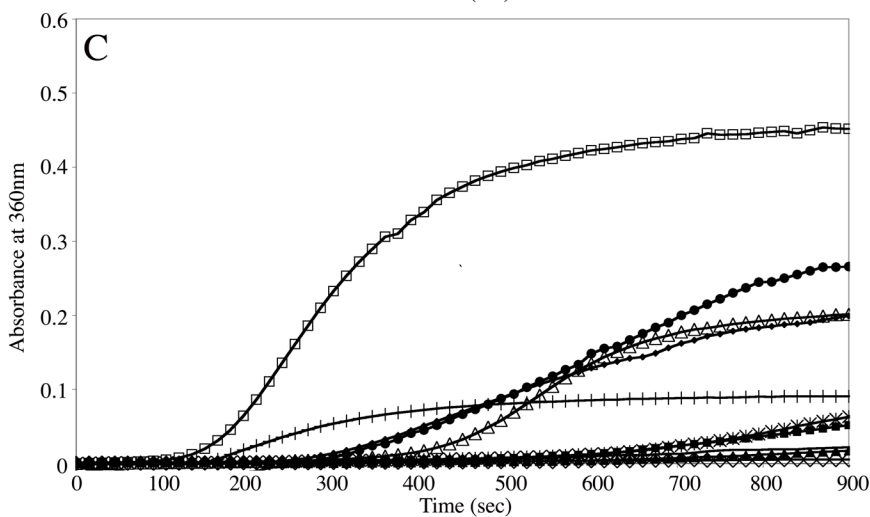
Supplementary Fig. 2



Supplementary Fig. 3

A

- ◆ Insulin control
- ◇ Wild Type
- * 450delA/ Wild Type
- 464delCT/ Wild Type
- + Q151X/ Wild Type
- Q151X
- E164X
- △ E165X
- ▲ K174X
- A171X

**B****C**

Supplementary Fig. 4