



**FIGURE S1.** (A) CD spectra of wild type B56 $\gamma$ 3 (WT) or C39R mutant in the far UV region. (B) Bacterially expressed and purified wild type B56 $\gamma$ 3, C39R and  $\Delta$ N73 were analyzed by sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE).

A

		C39R	$\Delta$ N40	$\Delta$ N73	WT
EV	HCT116+/+	p=0.75	p=0.79	p=0.67	p<0.01
	HCT116-/-	p=0.57	p=0.73	p=0.71	p<0.01
WT	HCT116+/+	p<0.01	p<0.01	p<0.01	
	HCT116-/-	p<0.01	p<0.01	p<0.01	

B

		C39R	$\Delta$ N40	WT
EV	HCT116+/+	p=0.28	p=0.11	p<0.01
	HCT116-/-	p=0.65	p=0.56	p<0.01
WT	HCT116+/+	p<0.01	p<0.01	
	HCT116-/-	p<0.01	p<0.01	

**FIGURE S2. Statistical analysis of cell growth and transformation data.** P-values for HCT116 cell growth experiments from Figure 3B (A) and anchorage independent cell growth experiments from Figure 4B (B) were calculated by comparing the effect of expressing the various mutants either versus the empty vector (EV) control or versus the wild type B56 $\gamma$ 3 (WT). Statistical significance was defined as  $P < 0.01$ .