

Table S1. Functional characterization of FGD4 domains and their respective effects on LMP1-mediated Cdc42 activation

	FGD4 constructs				
	Full length	$\Delta$ FAB	FAB-DH	PH1-2	$\Delta$ DH
Activation of Cdc42 <i>in vivo</i> <sup>a</sup>	Yes	Yes	Impaired	Impaired	Impaired
Enhanced function of LMP1 <sup>b</sup>	Yes	Yes	Impaired	Impaired	Impaired
Association with LMP1 <sup>c</sup>	Yes	Yes	Impaired	Yes	Yes
Association with Cdc42 <sup>b</sup>	Yes	Yes	Yes	Impaired	Impaired
Self-association with FGD4 <sup>e</sup>	Yes	Yes	Yes	ND <sup>f</sup>	Yes

<sup>a</sup> Activation of Cdc42 in NPC cells determined by GST-CBD-pulldown assays.

<sup>b</sup> LMP1-mediated Cdc42 activation was elevated by co-expression with individual FGD4 construct in NPC cells.

<sup>c</sup> Demonstrated by co-immunoprecipitation assays in NPC cells or *in vitro* GST-FGD4- pulldown assays.

<sup>d</sup> Demonstrated by co-immunoprecipitation assays in NPC cells.

<sup>e</sup> Demonstrated by co-immunoprecipitation assays in NPC cells.

<sup>f</sup> Not determined.