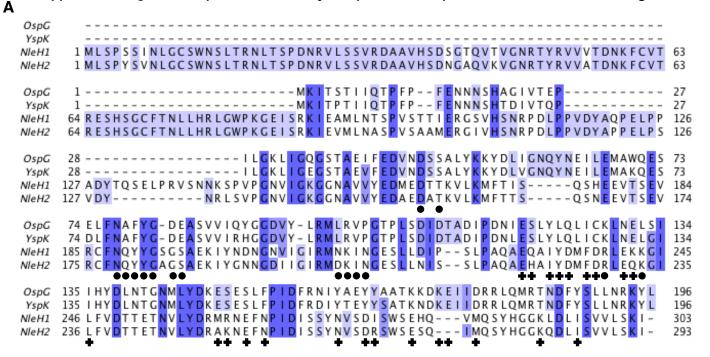
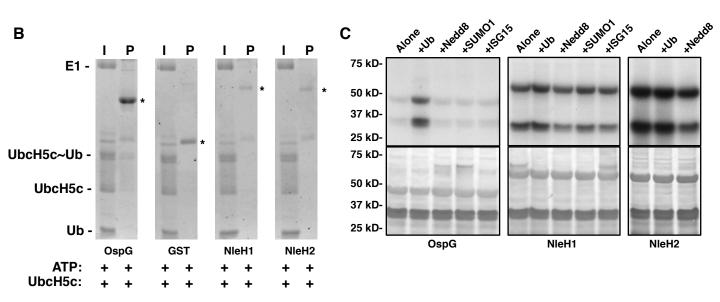
## Supplemental Figure 5: Sequence and activity comparison of OspG and related effector orthologs



- UbcH5c contact
- Ub contact



## Supplemental Figure 5: Sequence comparison between OspG and related effector orthologs.

a) Sequence alignment between OspG and the related effector kinases YspK (Yersinia pestis), NleH1, and NleH2 (EHEC Escherichia coli). Sequences are colored by conservation. Residues involved in the UbcH5c- and Ub-interfaces on OspG are indicated. b) Nonreducing pulldowns of UbcH5c~Ub using GST-OspG, GST, GST-NleH1, or GST-NleH2. GST-tagged proteins are indicated by asterisks. c) γ<sup>32</sup>P-ATP kinase assay measuring OspG, NleH1, and NleH2 activities against the kinase itself and Histone H1 in response to added Ub or Ubl proteins. Upper: <sup>32</sup>P-autoradiography. Lower: India ink stain for total protein.