

Supplemental Table

Table S1. Strains used in this study

Strain	Plasmid 1	Plasmid 2	Relevant genotype	Source or reference
<i>E. coli</i> DH10B			F ⁻ <i>mcrA</i> Δ(<i>mrr-hsdRMS-mcrBC</i>) φ80 <i>lacZ</i> ΔM15 Δ <i>lacX74 recA1 endA1</i> <i>araD139</i> Δ(<i>ara-leu</i>)7697 <i>galU galK</i> λ ⁻ <i>rpsL</i> (Str ^R) <i>nupG</i>	Thermo Fisher (18290015)
<i>E. coli</i> HB101	pIL22		pIL22 is pBR322 containing the pBR322 containing the AFA-I adhesin of uropathogenic <i>E. coli</i> K552	(1)
<i>S. flexneri</i> 2457T			Wildtype serotype 2a	(2)
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>			Deletion of <i>ipaB</i>	This study
<i>S. flexneri</i> 2457T Δ <i>acp</i>			Deletion of <i>acp</i>	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-wildtype <i>ipaB</i>		Δ <i>ipaB</i> expressing wildtype <i>IpaB</i>	This study

<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB C309S		Δ <i>ipaB</i> expressing IpaB C309S	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB I313C		Δ <i>ipaB</i> expressing IpaB I313C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB L314C		Δ <i>ipaB</i> expressing IpaB L314C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB G315C		Δ <i>ipaB</i> expressing IpaB G315C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB A316C		Δ <i>ipaB</i> expressing IpaB A316C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB L317C		Δ <i>ipaB</i> expressing IpaB L317C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB L318C		Δ <i>ipaB</i> expressing IpaB L318C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB T319C		Δ <i>ipaB</i> expressing IpaB T319C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB I320C		Δ <i>ipaB</i> expressing IpaB I320C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB V321C		Δ <i>ipaB</i> expressing IpaB V321C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB S322C		Δ <i>ipaB</i> expressing IpaB S322C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB V323C		Δ <i>ipaB</i> expressing IpaB V323C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB V324C		Δ <i>ipaB</i> expressing IpaB V324C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB A325C		Δ <i>ipaB</i> expressing IpaB A325C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB A326C		Δ <i>ipaB</i> expressing IpaB A326C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB A327C		Δ <i>ipaB</i> expressing IpaB A327C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB F328C		Δ <i>ipaB</i> expressing IpaB F328C	This study

<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB S329C		Δ <i>ipaB</i> expressing lpaB S329C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB G330C		Δ <i>ipaB</i> expressing lpaB G330C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB G331C		Δ <i>ipaB</i> expressing lpaB G331C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB A332C		Δ <i>ipaB</i> expressing lpaB A332C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB S333C		Δ <i>ipaB</i> expressing lpaB S333C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB L334C		Δ <i>ipaB</i> expressing lpaB L334C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB A335C		Δ <i>ipaB</i> expressing lpaB A335C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB L336C		Δ <i>ipaB</i> expressing lpaB L336C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB A337C		Δ <i>ipaB</i> expressing lpaB A337C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB A338C		Δ <i>ipaB</i> expressing lpaB A338C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB V339C		Δ <i>ipaB</i> expressing lpaB V339C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB G340C		Δ <i>ipaB</i> expressing lpaB G340C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB L341C		Δ <i>ipaB</i> expressing lpaB L341C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB A342C		Δ <i>ipaB</i> expressing lpaB A342C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB L343C		Δ <i>ipaB</i> expressing lpaB L343C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB M344C		Δ <i>ipaB</i> expressing lpaB M344C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB V345C		Δ <i>ipaB</i> expressing lpaB V345C	This study

<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB T346C		Δ <i>ipaB</i> expressing lpaB T346C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB D347C		Δ <i>ipaB</i> expressing lpaB D347C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB A348C		Δ <i>ipaB</i> expressing lpaB A348C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB V350C		Δ <i>ipaB</i> expressing lpaB V350C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB Q351C		Δ <i>ipaB</i> expressing lpaB Q351C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB A352C		Δ <i>ipaB</i> expressing lpaB A352C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB A353C		Δ <i>ipaB</i> expressing lpaB A353C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB T354C		Δ <i>ipaB</i> expressing lpaB T354C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB G355C		Δ <i>ipaB</i> expressing lpaB G355C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB N356C		Δ <i>ipaB</i> expressing lpaB N356C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB S357C		Δ <i>ipaB</i> expressing lpaB S357C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB F358C		Δ <i>ipaB</i> expressing lpaB F358C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB M359C		Δ <i>ipaB</i> expressing lpaB M359C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB Q361C		Δ <i>ipaB</i> expressing lpaB Q361C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB A362C		Δ <i>ipaB</i> expressing lpaB A362C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB L363C		Δ <i>ipaB</i> expressing lpaB L363C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB N364C		Δ <i>ipaB</i> expressing lpaB N364C	This study

<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB P365C		Δ <i>ipaB</i> expressing lpaB P365C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB I366C		Δ <i>ipaB</i> expressing lpaB I366C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB M367C		Δ <i>ipaB</i> expressing lpaB M367C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB K368C		Δ <i>ipaB</i> expressing lpaB K368C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB A369C		Δ <i>ipaB</i> expressing lpaB A369C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB E372C		Δ <i>ipaB</i> expressing lpaB E372C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB P373C		Δ <i>ipaB</i> expressing lpaB P373C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB L374C		Δ <i>ipaB</i> expressing lpaB L374C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB I375C		Δ <i>ipaB</i> expressing lpaB I375C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB K376C		Δ <i>ipaB</i> expressing lpaB K376C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB L378C		Δ <i>ipaB</i> expressing lpaB L378C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB S379C		Δ <i>ipaB</i> expressing lpaB S379C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB D380C		Δ <i>ipaB</i> expressing lpaB D380C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB A381C		Δ <i>ipaB</i> expressing lpaB A381C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB F382C		Δ <i>ipaB</i> expressing lpaB F382C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB T383C		Δ <i>ipaB</i> expressing lpaB T383C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB K384C		Δ <i>ipaB</i> expressing lpaB K384C	This study

<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB M385C		Δ <i>ipaB</i> expressing lpaB M385C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB L386C		Δ <i>ipaB</i> expressing lpaB L386C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB E387C		Δ <i>ipaB</i> expressing lpaB E387C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB G388C		Δ <i>ipaB</i> expressing lpaB G388C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB L389C		Δ <i>ipaB</i> expressing lpaB L389C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB G390C		Δ <i>ipaB</i> expressing lpaB G390C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB V391C		Δ <i>ipaB</i> expressing lpaB V391C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB D392C		Δ <i>ipaB</i> expressing lpaB D392C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB S393C		Δ <i>ipaB</i> expressing lpaB S393C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB K394C		Δ <i>ipaB</i> expressing lpaB K394C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB K395C		Δ <i>ipaB</i> expressing lpaB K395C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB A396C		Δ <i>ipaB</i> expressing lpaB A396C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB M398C		Δ <i>ipaB</i> expressing lpaB M398C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB I399C		Δ <i>ipaB</i> expressing lpaB I399C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB G400C		Δ <i>ipaB</i> expressing lpaB G400C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB S401C		Δ <i>ipaB</i> expressing lpaB S401C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB I402C		Δ <i>ipaB</i> expressing lpaB I402C	This study

<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB L403C		Δ <i>ipaB</i> expressing IpaB L403C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB G404C		Δ <i>ipaB</i> expressing IpaB G404C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB A405C		Δ <i>ipaB</i> expressing IpaB A405C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB I406C		Δ <i>ipaB</i> expressing IpaB I406C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB A407C		Δ <i>ipaB</i> expressing IpaB A407C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB G408C		Δ <i>ipaB</i> expressing IpaB G408C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB A409C		Δ <i>ipaB</i> expressing IpaB A409C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB L410C		Δ <i>ipaB</i> expressing IpaB L410C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB V411C		Δ <i>ipaB</i> expressing IpaB V411C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB L412C		Δ <i>ipaB</i> expressing IpaB L412C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB V413C		Δ <i>ipaB</i> expressing IpaB V413C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB A414C		Δ <i>ipaB</i> expressing IpaB A414C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB A415C		Δ <i>ipaB</i> expressing IpaB A415C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB V416C		Δ <i>ipaB</i> expressing IpaB V416C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB V417C		Δ <i>ipaB</i> expressing IpaB V417C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB L418C		Δ <i>ipaB</i> expressing IpaB L418C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB V419C		Δ <i>ipaB</i> expressing IpaB V419C	This study

<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB A420C		Δ <i>ipaB</i> expressing IpaB A420C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB A426C		Δ <i>ipaB</i> expressing IpaB A426C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB A427C		Δ <i>ipaB</i> expressing IpaB A427C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB A428C		Δ <i>ipaB</i> expressing IpaB A428C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB S454C		Δ <i>ipaB</i> expressing IpaB S454C	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-wildtype IpaB	pNG162-Afa1	Δ <i>ipaB</i> expressing wildtype IpaB and adhesin	Laboratory stock
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB I313C	pNG162-Afa1	Δ <i>ipaB</i> expressing IpaB I313C and adhesin	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB L314C	pNG162-Afa1	Δ <i>ipaB</i> expressing IpaB L314C and adhesin	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB G315C	pNG162-Afa1	Δ <i>ipaB</i> expressing IpaB G315C and adhesin	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB A316C	pNG162-Afa1	Δ <i>ipaB</i> expressing IpaB A316C and adhesin	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB L317C	pNG162-Afa1	Δ <i>ipaB</i> expressing IpaB L317C and adhesin	This study

<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB L318C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB L318C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB T319C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB T319C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB I320C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB I320C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB V321C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB V321C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB S322C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB S322C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB V323C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB V323C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB V324C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB V324C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB A325C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB A325C and adhesin	This study

<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB A326C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB A326C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB A327C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB A327C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB F328C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB F328C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB S329C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB S329C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB G330C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB G330C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB G331C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB G331C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB A332C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB A332C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB S333C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB S333C and adhesin	This study

<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB L334C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB L334C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB A335C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB A335C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB L336C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB L336C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB A337C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB A337C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB A338C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB A338C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB V339C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB V339C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB G340C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB G340C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB L341C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB L341C and adhesin	This study

<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB A342C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB A342C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB L343C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB L343C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB M344C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB M344C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB V345C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB V345C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB T346C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB T346C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB D347C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB D347C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB A348C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB A348C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB V350C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB V350C and adhesin	This study

<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB Q351C	pNG162-Afa1	Δ <i>ipaB</i> expressing lpaB Q351C and adhesin	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB A352C	pNG162-Afa1	Δ <i>ipaB</i> expressing lpaB A352C and adhesin	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB A353C	pNG162-Afa1	Δ <i>ipaB</i> expressing lpaB A353C and adhesin	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB T354C	pNG162-Afa1	Δ <i>ipaB</i> expressing lpaB T354C and adhesin	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB G355C	pNG162-Afa1	Δ <i>ipaB</i> expressing lpaB G355C and adhesin	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB N356C	pNG162-Afa1	Δ <i>ipaB</i> expressing lpaB N356C and adhesin	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB S357C	pNG162-Afa1	Δ <i>ipaB</i> expressing lpaB S357C and adhesin	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-lpaB F358C	pNG162-Afa1	Δ <i>ipaB</i> expressing lpaB F358C and adhesin	This study

<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB M359C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB M359C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB Q361C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB Q361C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB A362C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB A362C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB L363C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB L363C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB N364C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB N364C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB P365C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB P365C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB I366C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB I366C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB M367C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB M367C and adhesin	This study

<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB K368C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB K368C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB A369C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB A369C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB E372C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB E372C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB P373C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB P373C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB L374C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB L374C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB I375C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB I375C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB K376C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB K376C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB L378C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB L378C and adhesin	This study

<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB S379C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB S379C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB D380C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB D380C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB A381C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB A381C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB F382C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB F382C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB T383C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB T383C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB K384C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB K384C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB M385C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB M385C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB L386C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB L386C and adhesin	This study

<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB E387C	pNG162-Afa1	Δ <i>ipaB</i> expressing IpaB E387C and adhesin	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB G388C	pNG162-Afa1	Δ <i>ipaB</i> expressing IpaB G388C and adhesin	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB L389C	pNG162-Afa1	Δ <i>ipaB</i> expressing IpaB L389C and adhesin	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB G390C	pNG162-Afa1	Δ <i>ipaB</i> expressing IpaB G390C and adhesin	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB V391C	pNG162-Afa1	Δ <i>ipaB</i> expressing IpaB V391C and adhesin	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB D392C	pNG162-Afa1	Δ <i>ipaB</i> expressing IpaB D392C and adhesin	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB S393C	pNG162-Afa1	Δ <i>ipaB</i> expressing IpaB S393C and adhesin	This study
<i>S. flexneri</i> 2457T Δ <i>ipaB</i>	pDSW206-IpaB K394C	pNG162-Afa1	Δ <i>ipaB</i> expressing IpaB K394C and adhesin	This study

<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB K395C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB K395C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB A396C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB A396C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB M398C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB M398C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB I399C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB I399C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB G400C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB G400C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB S401C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB S401C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB I402C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB I402C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB L403C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB L403C and adhesin	This study

<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB G404C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB G404C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB A405C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB A405C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB I406C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB I406C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB A407C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB A407C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB G408C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB G408C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB A409C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB A409C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB L410C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB L410C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB V411C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB V411C and adhesin	This study

<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB L412C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB L412C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB V413C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB V413C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB A414C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB A414C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB A415C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB A415C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB V416C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB V416C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB V417C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB V417C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB L418C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB L418C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB V419C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB V419C and adhesin	This study

<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB A420C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB A420C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB A426C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB A426C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB A427C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB A427C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB A428C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB A428C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaB$	pDSW206-IpaB S454C	pNG162-Afa1	$\Delta ipaB$ expressing IpaB S454C and adhesin	This study
<i>S. flexneri</i> 2457T $\Delta ipaBC$	pDSW206-wildtype IpaB		$\Delta ipaBC$ expressing wildtype IpaB	This study
<i>S. flexneri</i> 2457T $\Delta ipaBC$	pDSW206-IpaB S454C		$\Delta ipaBC$ expressing IpaB S454C	This study

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