

Supplementary Materials:

Table S1. Pertinent sequence homologies for the scoring RFB proteins in TBRF IBs.

Species	E-Value	%BLASTp Homology	GenBank Accession Number
<i>Borrelia hermsii</i> FlaB (WP_012421925.1) protein homologues in pertinent bacteria			
<i>B. parkeri</i>	0	94	WP_025375191.1
<i>B. turicatae</i>	0	94	WP_011772107.1
<i>B. coriaceae</i>	0	92	WP_025407827.1
<i>B. turcica</i>	0	90	WP_120103961.1
<i>B. miyamotoi</i>	0	92	WP_020954538.1
<i>B. burgdorferi</i>	0	92	WP_002556748.1
<i>B. recurrentis</i>	0	90	WP_012538694.1
<i>B. lonestari</i>	0	87	AAW 38937.1
<i>Treponema pallidum</i>	8.00E-71	39	CAA 45382.1
<i>Treponema denticola</i>	3.00E-70	39	WP_002668950.1
<i>Escherichia coli</i>	6.00E-40	32	WP_096282488.1
<i>Borrelia hermsii</i> BipA (ADF49614.1) protein homologues in pertinent bacteria			
<i>B. turicatae</i>	3.00E-98	41	AGN 32383.1
<i>B. parkeri</i>	3.00E-82	55	AHF 45615.1
<i>B. duttoni</i>	7.00E-64	47	WP_012539436.1
<i>B. crocidurae</i>	2.00E-64	47	WP_025401306.1
<i>B. recurrentis</i>	7.00E-61	46	WP_012539315.1
<i>B. coriaceae</i>	4.00E-53	32	AHH11081.1
<i>B. miyamotoi</i>	4.00E-24	40	WP_099591036.1
<i>B. turcica</i>	3.00E-20	34	WP_120104729.1
<i>B. garinii</i>	2.00E-07	27	WP_032986216.1
<i>B. burgdorferi</i> ss	4.00E-06	25	ACO 38445.1
<i>E. coli</i> taxid	No significant homologues identified		
<i>Treponema</i> taxid	No significant homologues identified		
<i>Borrelia hermsii</i> GlpQ (ADD63790.1) protein homologues in pertinent bacteria			
<i>B. turicatae</i>	0	89	AAG 24363.1
<i>B. miyamotoi</i>	0	89	WP_025443886.1
<i>B. parkeri</i>	0	89	AAG 24362.1
<i>B. coriaceae</i>	0	88	AAG 24364.1
<i>B. turcica</i>	0	86	WP_120104645.1
<i>B. recurrentis</i>	2.00E-175	89	AHM 02189.1
<i>E. coli</i>	2.00E-115	49	WP_001400696.1
<i>Treponema pallidum</i>	3.00E-83	39	WP_010881706.1
<i>Treponema denticola</i>	3.00E-14	30	WP_002671949.1
<i>B. afzelli</i>	1.1	35	ACJ 73522.1
<i>B. burgdorferi</i> ss	No significant homologues identified		

Species	E-Value	%BLASTp Homology	GenBank Accession Number
<i>Borrelia hermsii</i> fHbp (WP_025407000.1) protein homologues in pertinent bacteria			
<i>B. turicatae</i>	6.00E-68	62	WP_020282240.1
<i>B. parkeri</i>	8.00E-66	62	CBJ 18717.1
<i>B. miyamotoi</i>	6.00E-52	52	WP_084821552.1
<i>B. valaisiana</i>	2.00E-45	56	WP_015899234.1
<i>B. coriaceae</i>	2.00E-44	52	WP_025408527.1
<i>B. recurrentis</i>	1.00E-36	42	CAV 05787.1
<i>B. bavariensis</i>	4.00E-31	40	WP_123772075.1
<i>B. afzelli</i>	4.00E-30	40	WP_011703930.1
<i>B. burgdoferi</i> ss	No significant homologues identified		
<i>E. coli</i> taxid	No significant homologues identified		
<i>Treponema</i> taxid	No significant homologues identified		