

**Supplementary 4****Table. Consensus Predation-essential hypothetical proteins**

|    | Protein ID     | Old Locus Tag | Product Name (NCBI)                                                     |
|----|----------------|---------------|-------------------------------------------------------------------------|
| 1  | WP_011162725.1 | Bd0110        | type II secretion system F family protein                               |
| 2  | WP_011162726.1 | Bd0111        | ATPase, T2SS/T4P/T4SS family                                            |
| 3  | WP_011162727.1 | Bd0112        | BON domain-containing protein                                           |
| 4  | WP_011162728.1 | Bd0113        | Flp pilus assembly protein CpaB                                         |
| 5  | WP_011162729.1 | Bd0114        | hypothetical protein                                                    |
| 6  | WP_011162730.1 | Bd0115        | hypothetical protein                                                    |
| 7  | WP_011162731.1 | Bd0117        | hypothetical protein                                                    |
| 8  | WP_011162732.1 | Bd0118        | hypothetical protein                                                    |
| 9  | WP_011162733.1 | Bd0119        | Flp1 family type IVb pilin                                              |
| 10 | WP_157865749.1 | Bd0150        | hypothetical protein                                                    |
| 11 | WP_157865623.1 | Bd0161        | hypothetical protein                                                    |
| 12 | WP_231839255.1 | Bd0470        | type II secretion system F family protein                               |
| 13 | WP_011163054.1 | Bd0471        | DUF192 domain-containing protein                                        |
| 14 | WP_011163055.1 | Bd0472        | FHA domain-containing protein                                           |
| 15 | WP_011163056.1 | Bd0473        | FHA domain-containing protein                                           |
| 16 | WP_011163057.1 | Bd0474        | FHA domain-containing protein                                           |
| 17 | WP_011163058.1 | Bd0475        | hypothetical protein                                                    |
| 18 | WP_011163298.1 | Bd0739        | hypothetical protein                                                    |
| 19 | WP_011163343.1 | Bd0791        | cytochrome P450                                                         |
| 20 | WP_226988005.1 | Bd0792        | cupredoxin domain-containing protein                                    |
| 21 | WP_011163345.1 | Bd0793        | CpaF family protein                                                     |
| 22 | WP_011163382.1 | Bd0832        | tetratricopeptide repeat protein                                        |
| 23 | WP_011163387.1 | Bd0838        | biopolymer transporter ExbD                                             |
| 24 | WP_011163418.1 | Bd0871        | hypothetical protein                                                    |
| 25 | WP_011163557.1 | Bd1023        | ATP-binding cassette domain-containing protein                          |
| 26 | WP_011163788.1 | Bd1290        | prepilin-type N-terminal cleavage/methylation domain-containing protein |
| 27 | WP_038448782.1 | Bd1434        | GGDEF domain-containing protein                                         |
| 28 | WP_011163964.1 | Bd1478        | adventurous gliding motility protein U                                  |
| 29 | WP_011163965.1 | Bd1479        | biopolymer transporter ExbD                                             |
| 30 | WP_011164234.1 | Bd1769        | ATP-binding cassette domain-containing protein                          |
| 31 | WP_011164332.1 | Bd1877        | ABC transporter ATP-binding protein                                     |
| 32 | WP_011164398.1 | Bd1946        | outer membrane beta-barrel protein                                      |
| 33 | WP_011164433.1 | Bd1981        | hypothetical protein                                                    |
| 34 | WP_041583553.1 | Bd2209        | EF-hand domain-containing protein                                       |
| 35 | WP_011164646.1 | Bd2210        | hypothetical protein                                                    |
| 36 | WP_011164647.1 | Bd2211        | hypothetical protein                                                    |
| 37 | WP_011164648.1 | Bd2212        | hypothetical protein                                                    |
| 38 | WP_041583564.1 | Bd2325        | HD-GYP domain-containing protein                                        |
| 39 | WP_011165116.1 | Bd2723        | EF-hand domain-containing protein                                       |
| 40 | WP_011165510.1 | Bd3148        | protein kinase                                                          |

|    |                |        |                      |
|----|----------------|--------|----------------------|
| 41 | WP_011165652.1 | Bd3304 | hypothetical protein |
| 42 | WP_041583662.1 | Bd3772 | hypothetical protein |
| 43 | WP_231839223.1 | Bd3839 | hypothetical protein |

**Bd0075 binds Bd0474 in the Prescence of Bd3743**

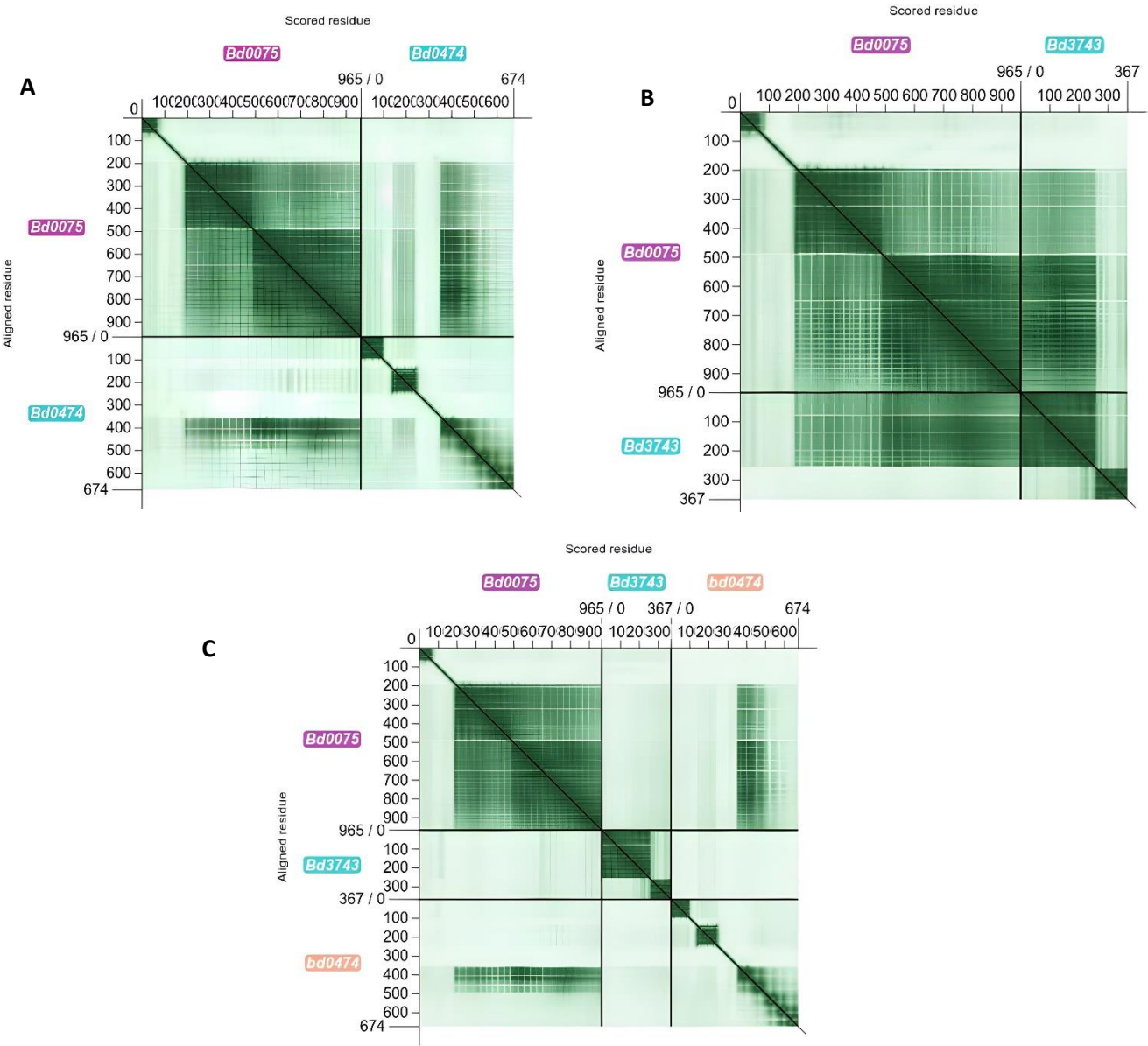


Figure. Predicted Aligned Error plots showing A) Bd0075-Bd0474 interaction, Bd0075 Fold-C interacts with the Bd0474 Fold-C. B) Bd0075-Bd3743 interaction, Bd0075 Fold-C interacts with Fold-A of Bd3743. C) The Fold-C of Bd0075 selectively interacts with Bd0474 in the presence of Bd3743.

**Bd0075 sequences from 14 *Bdellovibrio* sp. aligned to calculate conservation scores.**

>B.b\_HD100

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>B.b\_109J

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>B.b\_SSB

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>B.b\_Tiberius

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>B.b\_Kdesi

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>B.Reynosensis

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>B.spNC01

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>B.b\_w

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>B.b\_SKB

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>B.spZAP7

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>B.spKM01

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>B.Exovorus

MSDNSGGQWVIKIQSDQVKGPYSTDAVIKMILQGVFSGNEEICAYPEGWKALTKQPEFYDALLELENP  
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>B.sp\_qaytius

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