

**Table S3. PGN\_1234 PSI-BLAST matches to WbpS and WbqG compared to AsnB**

Species	<sup>a</sup> NCBI	<sup>b</sup> Uniprot	Name	<sup>c</sup> E-value	<sup>d</sup> % cov, % id	<sup>e</sup> CD top hit
<i>P. aeruginosa</i>	WP_012613869.1	Q9RHD2_PSEAI	WbpS	6E <sup>-79</sup>	92, 17.3	eps_aminotran_1
<i>E. coli</i>	WP_032178609.1	J3RWI0_ECOLX	WbqG	6E <sup>-76</sup>	97, 17.2	eps_aminotran_1
<i>P. aeruginosa</i>	WP_003115546.1	Q9I231_PSEAE	AsnB	3E <sup>-61</sup>	88, 14.3	AsnB
<i>E. coli</i>	WP_000337077.1	ASNB_ECOLI	AsnB	1E <sup>-43</sup>	92, 15.1	AsnB

BLAST settings: PSI-BLAST, 2 iterations; taxonomy = gamma proteobacteria; max # hits = 10,000; Database = NCBI nr; Input sequence = PGN\_1234.

<sup>a</sup>The NCBI accessions are non-redundant sequences that match to the same protein from many different strains.

<sup>b</sup>The uniprot accessions are unique and match the protein name provided

<sup>c</sup>E-value = Expect Value

<sup>d</sup>% cov = coverage of sequence (%); % id = level of sequence identity (%)

<sup>e</sup>The top hit to the conserved domain database (<https://www.ncbi.nlm.nih.gov/Structure/cdd/wrpsb.cgi>)