glpT MLSIFKPAPHKARLPAAEIDPTYRRLRWQIFLGIFFG**Y**AAY**Y**LV**RK**NFALAMPYLVEQ-G

AepP ---------MNQSLAA------FKRWRIQIFAITWLA**Y**AAF**Y**FT**RK**AFSVAKLGIAEDPG

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glpT FSRGDLGFA-LSGISI-A**Y**GFS**K**FIMGSVSDRSNPRVFLPAGLILAAAVMLFMGFVPWAT

AepP FMLDKAAMANLDAIYLAA**Y**AVG**Q**FTWGMLADRFGPRVVVLGGLLISAAAAVVMG----SY

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glpT SSIAVMFVLLFLCGWFQGMGWPPCGRTMVHWWSQKERGGIVSVW**N**CA**H**NVGGGI-PPLLF

AepP ATFPIFATCMLVQGLAQSTGWAGLCKNIGSFFPASQRGRVLGLW**S**SC**Y**AFGGLVASPFAG

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glpT LLGMAWFNDWHAALYMPAFCAILVALFAFAMMRDTPQSCGLPPIEEYKNDYPDDYNEKAE

AepP WWAYTLVGNWHAAFFSSAAVVALVAVLFFFLQRNKPEDVGLPAVE------PEPQSMAPA

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glpT QELTAKQIFMQYVLPNKLLWYIAIANVFV**Y**LL**RY**GIL**D**WSPTY-LKEVKHFALDKSSWAY

AepP GSLCSVWAPLREILRNRTVLTLGLAYFLL**K**PA**RY**AIL**L**WGPVIVFEQMPSVGKVGAAIIP

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glpT FLY**E**YAGIPGTLLCGWMSDKVFRGNRGATGVFFMTLVTIATIVYWMNP--AGNPTVDMIC

AepP TAF**E**LAGLLGPIMIGLASDKLFGARRMPACVISLVLLTV-TLALFMAAMHTGSVLLVVVL

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glpT MIVIGFLIYGP-VMLIGLHALELAPKKAAGTAAGFTGLFG**Y**LGGSVAASAIVGYTVDFFG

AepP LFVMGLTLYGPDSMISGAAAIDFGTAKAGATAAGFVNGCG**S**VGAVLG-----GLLPGYFD

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glpT WDGGFMVMIGGSILAVILLIVVMIGEKRRHEQLLQERNGG---------

AepP GVTVFIVFAGCALFSALVLLPHWNSRPASSAQGTDVAPNTSMAIKPLRT

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**Figure S4.** ClustalOmega alignment of GlpT, the glycerol-3-phosphate/phosphate (G3P/Pi) antiporter, and AepP protein sequences. Residues that have been shown to bind with the phosphate moiety of G3P, and/or Pi are shown in red if identical, in orange if related, and in blue if unrelated. Residues involved in binding the glycerol moiety of G3P are shown in green.