

Supplementary material

The major facilitator superfamily (MFS) transporter Fsr is required for fosfomycin resistance and contributes to symbiotic efficiency in *Sinorhizobium meliloti* 1021

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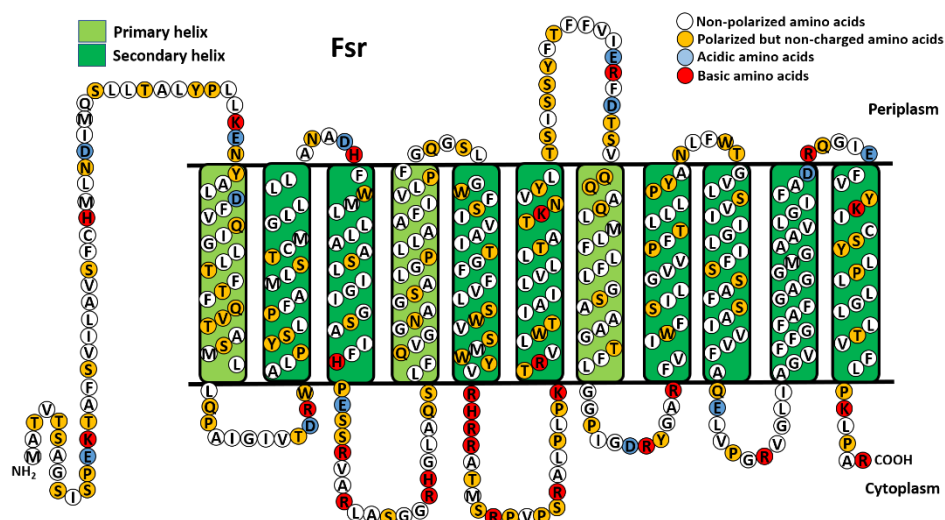


Figure S1A. Predicted secondary structure of Fsr. The secondary structure of Fsr was predicted from the sequence information using AlphaFold protein structure database (<https://alphafold.ebi.ac.uk/search/text/Q92RK8>). The protein contains 11 transmembrane helices.

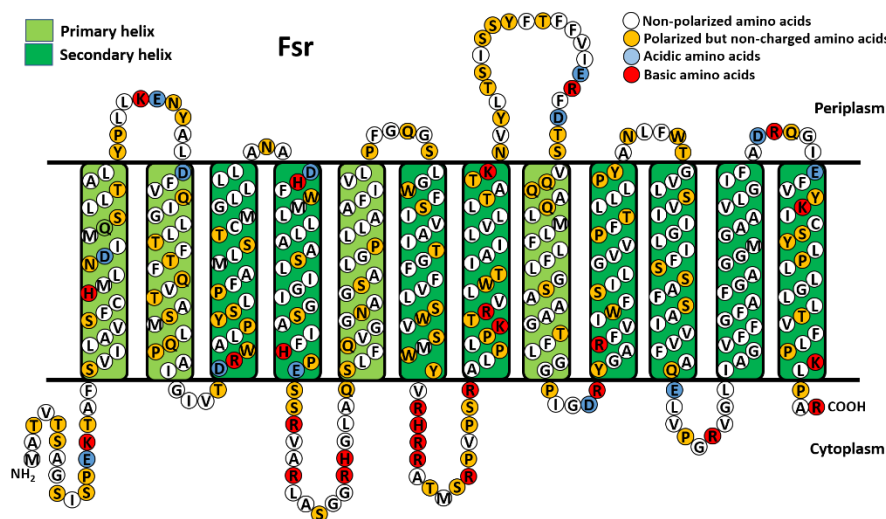


Figure S1B. Predicted secondary structure of Fsr. The secondary structure of Fsr was predicted from the sequence information using HMMTOP (<http://www.enzim.hu/hmmtop/html/submit.php>). The protein contains 12 transmembrane helices that are typical of MFS transporters.

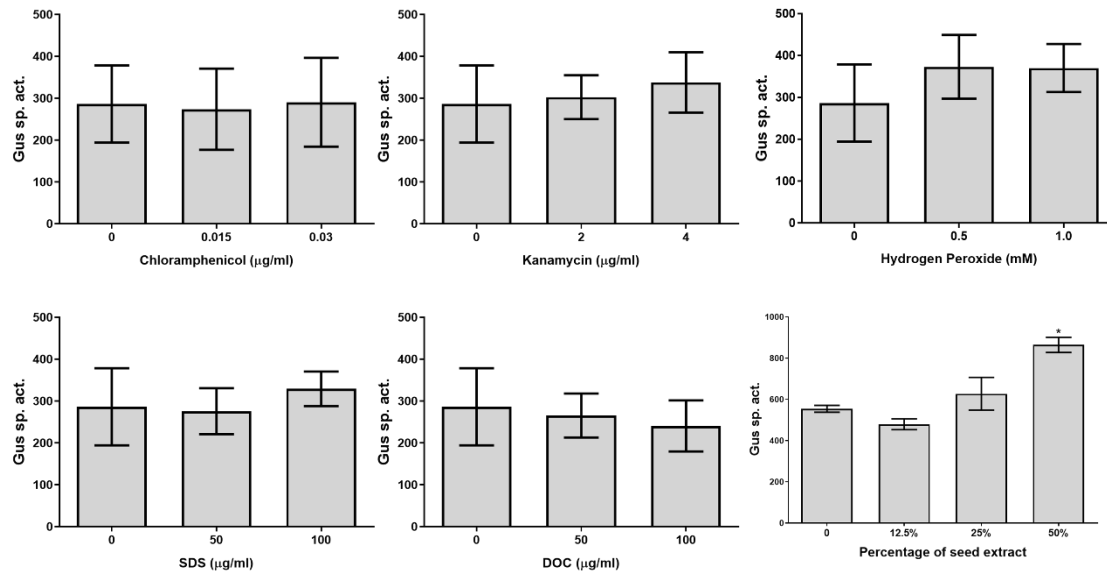


Figure S3. β -glucuronidase (Gus) activity produced by *S. meliloti*

1021/pBBR53Fsr::gusA grown for 18 h in MMSN minimal medium with the indicated concentration of indicated compound. Values are the mean+SD for two independent experiments with three technical replicates.

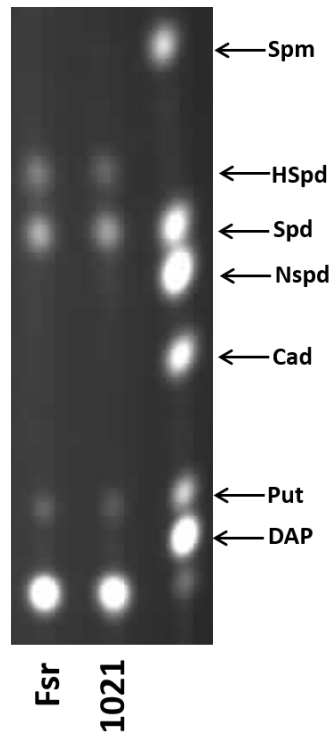


Figure S4. HPTLC detection of cytoplasmic dansyl-polyamines from 24 h cultures of the *S. meliloti* 1021 wild type and *Fsr* mutant. Dansyl-polyamine identities are shown to the right of the image (1,3-diaminopropane (DAP); putrescine (Put); cadaverine (Cad); norspermidine (Nspd); spermidine (Spd); homospermidine (HSpd); and spermine (Spm)). The polyamine profiles of both strains are identical, consisting of putrescine, spermidine, and homospermidine.