

Composite Parts

FOR ANTIDOTE

T7 promoter + Thioredoxin-FGD fusion protein

This part contains a T7 promoter and Thioredoxin-FGD fusion protein, and terminators are included. By ligating these two different parts as a fusion protein, it is supposed to raise the solubility of our protein, F420-dependent glucose-6-phosphate dehydrogenase (FGD).

T7 promoter + Thioredoxin-MSMEG_5998 fusion protein

This part contains a T7 promoter and Thioredoxin-MSMEG_5998 fusion protein, and terminators are included. By ligating these two different parts as a fusion protein, it works better than MSMEG_5998 alone.

FOR TEST STRIP

Anti-aflatoxin scFv fusion protein construction DNA sequence (BBa_K2382010)

By ligating the constitutive promoter (BBa_J23101), strong ribosome binding site (BBa_B0034) and scFv-EAAAK-RFP-Histag, we were able to detect aflatoxin by the purified protein expressing in *E. coli*. Moreover, we designed a restriction site, BamHI, between scFv and EAAAK, so future iGEM teams could take advantage of this composite part to fuse their scFv with RFP as indicator, and make their own test strip!