

1       **Real time optical detection of gold in living cells through genetically-encoded probe**

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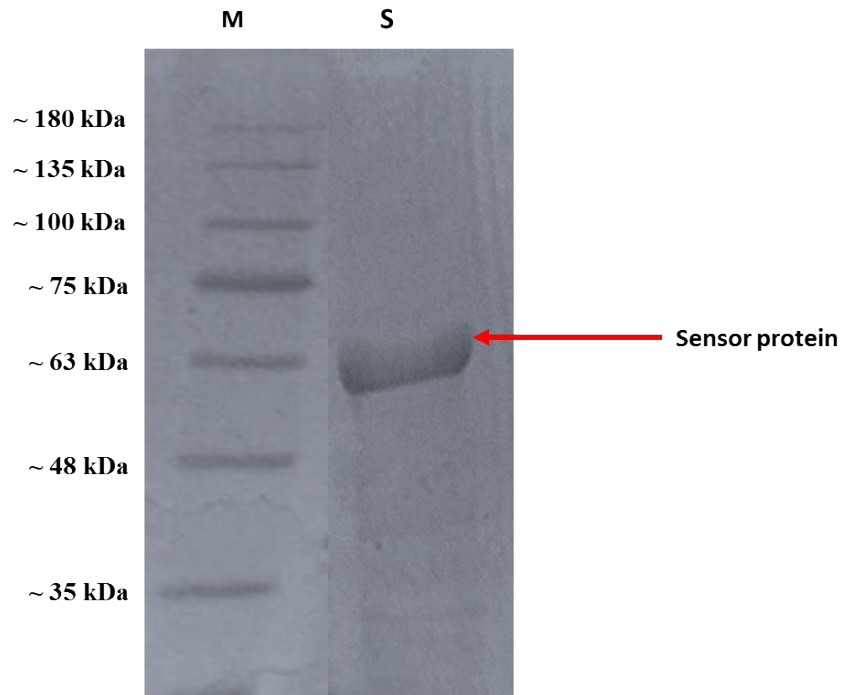
23 **FIG. S1.**The BLAST result of GolB gene. The subject is the result of the sequencing, whereas  
 24 the query is the original sequence.

Score	Expect	Identities	Gaps	Strand
361 bits(195)	6e-105	195/195(100%)	0/195(0%)	Plus/Plus
Query 1	GGTATGCAGTTCACATCGACGATATGACCTGCGGTGGCTGCGCGAGCACCGTGAAGAAA	60		
Sbjct 1	GGTATGCAGTTCACATCGACGATATGACCTGCGGTGGCTGCGCGAGCACCGTGAAGAAA	60		
Query 61	ACCATTCTGACCCTGGACGCGAACGCGACCGTTTCGTACCGACCCGGCGACCCGTCTGGTG	120		
Sbjct 61	ACCATTCTGACCCTGGACGCGAACGCGACCGTTTCGTACCGACCCGGCGACCCGTCTGGTG	120		
Query 121	GATGTTGAGACCAGCCTGAGCGCGGAACAGATTGCTGCGGCGCTGCAAAAGGCGGGTTTT	180		
Sbjct 121	GATGTTGAGACCAGCCTGAGCGCGGAACAGATTGCTGCGGCGCTGCAAAAGGCGGGTTTT	180		
Query 181	CCGCCGCGTGAGCGT	195		
Sbjct 181	CCGCCGCGTGAGCGT	195		

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26 **FIG. S2.**SDS-PAGE profile of the sensor protein. M: Marker, S: Sample.

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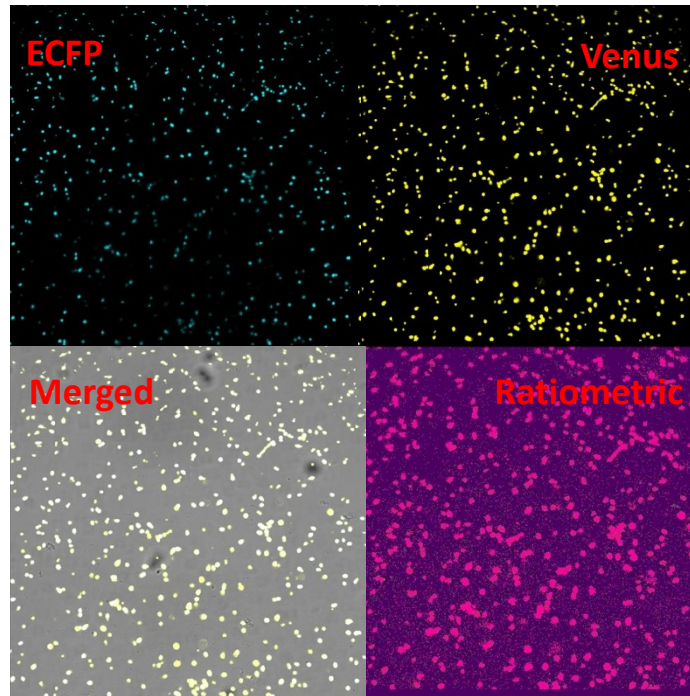


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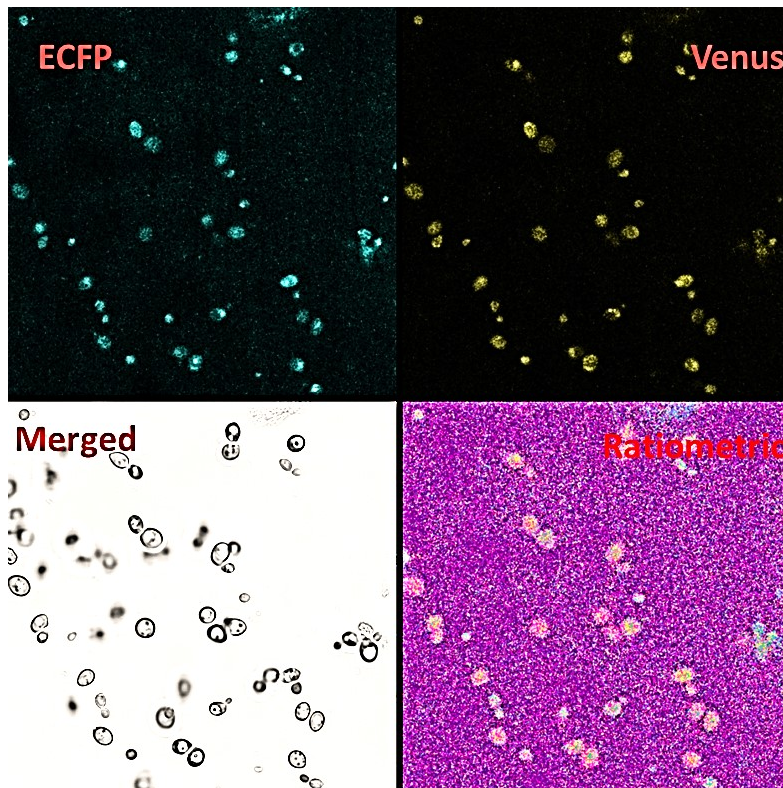
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31 **FIG. S3.**Confocal image of bacterial cells demonstrating effective expression of AuSEN-25,  
32 which is genetically encoded.



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34 **FIG. S4.**Confocal image of yeast cells expressing AuSEN-25.



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