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Specific Biosensor for Al ions

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## ACCEPTED MANUSCRIPT

### Catechol-Modified Green Fluorescent Protein as a Specific Biosensor for Al ions

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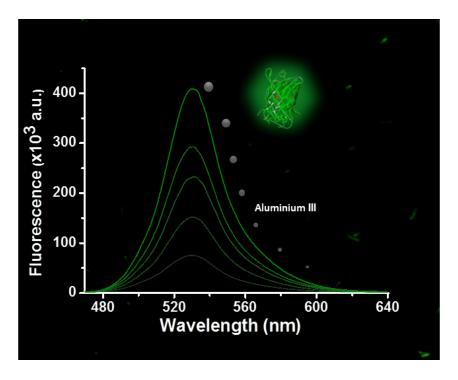
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## **Graphical Abstract**

## Highlights

- A fluorescent protein-based biosensor that genetically incorporates a metal ion binding site was produced.
- The protein biosensor showed a selective fluorescence enhancement in the presence of  $Al^{3+}$  at the  $\mu M$  level.
- *In vivo* tests were carried out to demonstrate the detection performance in practical situations.

#### **Abstract**

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