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Fungal FAD-dependent glucose dehydrogenases concerning high activity, affinity, and thermostability for maltose-insensitive blood glucose sensor

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Highlights

- Six FAD-dependent glucose dehydrogenase genes were cloned from *Aspergillus* species
- The recombinant enzymes produced by *Pichia pastoris* were characterized
- All the enzymes exhibited maltose insensitivity, ~~necessary for blood glucose sensor~~
- The enzyme from *A. phoenicis* exhibited D-xylose insensitivity
- The enzymes exhibited high activity, high affinity, or high thermostability

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