

## Recombinant Fructosyl Amino Acid Oxidase (FAOD)

### Product Information

<b>Cat#</b>	BDE-054
<b>Description</b>	Fructosyl amino acid oxidase (FAOD) is an FAD-dependent oxidoreductase that specifically oxidizes fructosyl amino acids to produce hydrogen peroxide, glucuronolactone, and the corresponding amino acid. It is widely used in HbA1c assays, where HbA1c reflects long-term glycemic control and serves as the gold standard for diabetes management.
<b>Applications</b>	Used in glycated albumin and glycated amino acid detection kits to support enzymatic monitoring for diabetes management.
<b>Enzyme Commission Number</b>	EC 1.5.3.X
<b>Form</b>	Yellow lyophilized powder, or solution
<b>Source</b>	Recombinant protein expression
<b>Activity</b>	75 U/mg
<b>Unit Definition</b>	One unit is defined as the amount of enzyme required to catalyze the production of 1 $\mu\text{mol}$ of $\text{H}_2\text{O}_2$ per minute under specified assay conditions (pH 8.0, 37 °C).
<b>Molecular Weight</b>	63 kDa (SDS-PAGE)
<b>Purity</b>	$\geq 90\%$ by SDS-PAGE
<b>Storage</b>	Freeze-dried powder: Store at 4°C for one year or at -20°C for two years (sub-aliquoting is recommended to avoid repeated freeze-thaw cycles).