

Lactate Oxidase (LOX)

Catalog Number LDG0033RG

Package Customized package

For full product information, images and publications, please visit [our website](#).



Specifications

Expression system

Escherichia coli

Activity

≥200 U/mg

Unit Definition

One unit causes the formation of one micromole of hydrogen peroxide (half a micromole of quinoneimine dye) per minute under the conditions described below.

Form

Lyophilized (Yellowish amorphous powder)

Background

Synonyms

LOX, LctO, Lactic oxygenase, Lactic oxidase, Lactate monooxygenase, L-lactate oxidase

Instruction

Reconstitution

It is recommended to weight and reconstitute 10 mg of lyophilized powder in 200 µL double-distilled water directly (final activity is 10 U/ µL) and incubate the solution for at least 10 mins to ensure sufficient re-dissolved.

Shipping

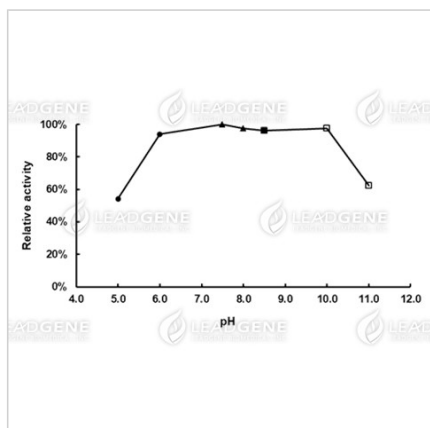
The product is shipped with polar packs. Upon receipt, store it immediately at -20°C or lower for long term storage.

Stability & Storage

This product is stable at -20°C for long-term storage under sterile conditions.

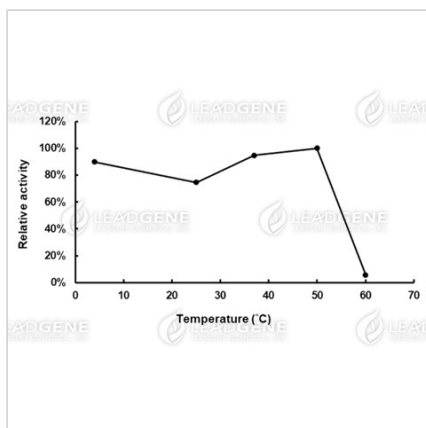
Avoid repeated free-thaw cycles.

Image



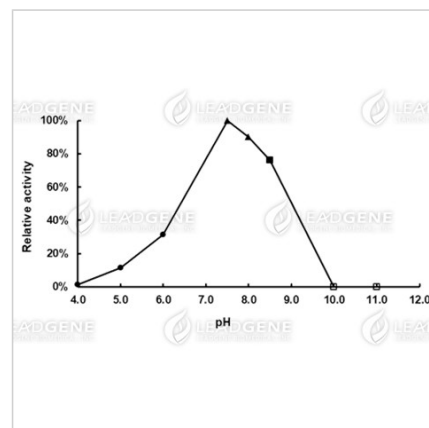
pH stability of LOX.

The enzyme powder was reconstituted by double-distilled water and treated with different pH buffer condition at 25°C for 16 hours. pH 4.0-6.0, 0.1 M Sodium citrate buffer; pH 7.5-8.0, 0.1 M Potassium phosphate buffer; pH 8.5, 0.1 M Tris-HCl buffer; pH 10.0-11.0, 0.1 M Carbonate-bicarbonate buffer.



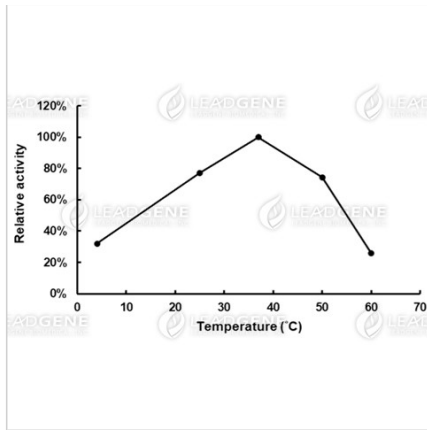
Thermal stability of LOX.

The enzyme powder was reconstituted by double-distilled water and treated with different temperatures for 10 minutes. Final concentration: 10 U/ mL.



pH activity of LOX.

The buffer conditions with various pH values were used in the reaction at 37°C. pH 4.0-6.0, 0.1 M Sodium citrate buffer; pH 7.5-8.0, 0.1 M Potassium phosphate buffer; pH 8.5, 0.1 M Tris-HCl buffer; pH 10.0-11.0, 0.1 M Carbonate-bicarbonate buffer.



Temperature activity of LOX.

The enzyme reactions in 20 M K-Phosphate buffer, pH 7.5, were carried out under different temperatures.

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