Lactate oxidase (LOD) is a member of a family of FMN (flavin mononucleotide)-dependent alpha hydroxy acid oxidizing enzymes and catalyzes the oxidation of L-lactate to pyruvate with reduction of O2 to H2O2. LOD is widely employed in biosensors to measure lactate concentration.

**Source:**
Aerococcus viridans

**Purity:**
Purified

**Specification:**

**Form:**
Supplied as a yellow lyophilized powder.

**Activity:**
>20 units/mg solid

**Protein:**
As Reported

**Unit Definition:**
One unit is defined as amount of enzyme which generates 1umole of hydrogen peroxide per minute at pH 6.5 at 37°C under standard assay conditions.

**Specific Activity:**
>50 units/mg protein

**Contaminating Enzymes:**
As Reported

**Storage and Stability:**
Lyophilized powder may be stored at -20°C. Stable for 12 months after receipt at -20°C. Reconstitute with sterile buffer. Aliquot to avoid repeated freezing and thawing. Store at -20°C. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Further dilutions can be made in assay buffer.

**Lot Analysis:**

Supplied as a yellow lyophilized powder.

36 units/mg solid at 37°C

0.14mg protein/mg solid (Lowry)

257.1 units/mg protein at 37°C

Pyruvate Oxidase: <0.00004%
Glucose Oxidase: <0.00001%
Uricase: 0.000011%
Cholesterol Oxidase: 0.001%