上海源叶生物科技有限公司
Shanghai yuanye Bio-Technology Co., Ltd
电话：021-61312973　传真：021-55068248
网址：www.shyuanye.com
邮箱：shyysw@sina.com

等离子体胺氧化酶 检测方法

1　原理

Determination of amine oxidases has been thoroughly reviewed by Kapeller-Adler (1971). The method employed at Worthington is essentially that of Tabor et al. (1954) with the reaction temperature reduced to 25°C. The reaction velocity is determined as an increase in absorbance at 250 nm resulting from the oxidation of benzylamine. One unit results in the oxidation of one micromole of benzylamine per minute at 25°C and pH 7.2 under the specified conditions. One International Unit so defined is equivalent to 4330 Tabor units (Tabor and Tabor 1972).

2　试剂：

- 67 mM Potassium phosphate buffer pH 7.2
- 1.0% v/v (0.10 M) Benzylamine (if at all colored, re-distill) in 67 mM Potassium phosphate buffer, pH 7.2 (Substrate)

3　酶：

Dissolve to a concentration of 10 mg/ml in 67 mM potassium phosphate buffer, pH 7.2.

4　操作规程：

Adjust spectrophotometer to 250 nm and 25°C. Into each cuvette pipette 2.8 ml of buffer and 0.1 ml of substrate solution.

Incubate in spectrophotometer for 3-4 minutes to reach temperature equilibration and to establish a blank rate, if any. Add 0.1 ml of enzyme solution and record increase in A_{250} for 6-8 minutes. Calculate ΔA_{250}/minute from the linear portion of the curve. A 2-3 minute lag may occur after which the reaction should be linear to an A_{250} of 0.75.

5　计算

$$\frac{\text{Units}}{\text{g}} = \frac{\frac{\Delta A_{250}}{\text{min}} \text{ x } 1000}{13.0 \text{ x } \frac{\text{mg enzyme}}{\text{ml reaction mixture}}}$$