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# ProductInformation

Choline Oxidase from *Alcaligenes sp.* 

Product Number **C 5896** Storage Temperature -0 °C

### **Product Description**

Enzyme Commission (EC) Number: 1.1.3.17 CAS Number: 9028-67-5 Molecular Weight: 66 kDa (SDS-PAGE) and 72 kDa  $(gel filtration)^{1}$  pl: 4.1 ± 0.1.

The enzyme can be used for the enzymatic determination of phospholipids by coupling with phospholipase D and for cholinesterase activity assays.<sup>2,3</sup>

This enzyme has several inhibitors:

p-chloromercuribenzoate, Cu, Co, Hg, and Ag ions. The optimal pH is 8.0 - 8.5. The optimal temperature is 40 - 45 °C.

### **Precautions and Disclaimer**

For Laboratory Use Only. Not for drug, household or other uses.

## Storage/Stability

Solution stability was measured as a plot of activity vs. time for an enzyme concentration of 1.0 mg/ml in 0.1 M potassium phosphate buffer, pH 7.5, at 37 °C. Approximately 75% of the enzymatic activity remainded after 16 hours. In the presence of 10 mM EDTA or 0.5 mg/ml BSA, there is approximately 90% enzymatic activity remaining. Addition of both EDTA and BSA resulted in nearly 100% enzymatic activity remaining after 16 hours.

### References

- Ohta-Fukuyama, M., Identification and Properties of the Prosthetic Group of Choline Oxidase from Alcaligenes Sp. J. Biochem., 88, 197-203 (1980).
- 2. Takayama, M. et al., Clin. Chim. Acta, 79, 93 (1977).
- 3. Okabe, H. et al., Clin. Chim. Acta, 80, 87 (1977).

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