

Cholesterol Oxidase from *Streptomyces* sp.

Product Information

Cat#	NATE-0128
Similar	Cholesterol Oxidase
Source	<i>Streptomyces</i> sp.
Description	Cholesterol oxidase (CHOD) is a monomeric flavoprotein containing FAD that catalyzes the first step in cholesterol catabolism. This bifunctional enzyme oxidizes cholesterol to cholest-5-en-3-one in an FAD-requiring step, which is then isomerized to cholest-4-en-3-one with the release of H ₂ O ₂ .
Form	Freeze dried powder
Enzyme Commission Number	EC 1.1.3.6
Activity	15U/mg-solid or more
CAS No.	9028-76-6
Isoelectric point	5.1 ± 0.1 and 5.4 ± 0.1
pH Stability	pH 5.0 – 10.0 (25°C, 20hr)
Michaelis Constant	4.3 x 10 ⁻⁵ M (Cholesterol)
Unit Definition	One unit will convert 1.0 µmole of cholesterol to 4-cholesten-3-one per min at pH 7.5 at 25°C. Note: 4-cholesten-3-one may undergo isomerization.
Optimum pH	6.5 – 7.0
Optimum temperature	45 – 50°C
Thermal stability	Below 45°C (pH 7.0, 15min)
Storage	-20°C
Buffer	50 mM potassium phosphate buffer, pH 7.0: soluble (Cold)

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Inhibitors Ionic detergents, Hg++, Ag+

Synonyms EC 1.1.3.6, cholesterol-O2 oxidoreductase; 3 β -hydroxy steroid oxidoreductase; 3 β -hydroxysteroid:oxygen oxidoreductase; 9028-76-6