

# CHOLESTEROL ESTERASE & OXIDASE

<b>Product</b>	Cholesterol Esterase	Cholesterol Oxidase
<b>EC Number</b>	3.1.1.13	1.1.3.6
<b>Alternative Names</b>	Sterol esterase; Cholesterol ester synthase; Triterphenol esterase	
<b>Assay Principle</b>	Cholesteryl Acetate + H <sub>2</sub> O → Cholesterol esterase → Cholesterol + Acetic acid Cholesterol + O <sub>2</sub> + H <sub>2</sub> O → Cholesterol oxidase → Cholestenone + H <sub>2</sub> O <sub>2</sub> H <sub>2</sub> O <sub>2</sub> + 4-Aminophenazone + Phenol → Peroxidase → Quinoneimine dye + H <sub>2</sub> O	
<b>Unit Definition</b>	CE2 That amount of enzyme catalysing the production of one micromole of cholesterol per minute at 37°C under specified conditions of assay. CE4F That amount of enzyme causing the formation of one micromole of hydrogen peroxide (half a micromole of quinoneimine dye) per minute at pH 7.0 and 37°C. C05F That amount of enzyme causing the formation of one micromole of hydrogen peroxide (half a micromole of quinoneimine dye) per minute at pH 7.0 and 37°C.	

## How can Cholesterol Esterase & Oxidase be used?

Our Cholesterol Esterase & Oxidase products can be used in both Biosensor and Clinical Chemistry applications.

In conjunction with peroxidase they are used for the determination of serum cholesterol.

Our Cholesterol Esterase is available from porcine pancreas (CE2) or Pseudomonas sp. (CE4F) to suit your application.

## Why BBI?

- + Security of supply – direct relationships with abattoirs and recombinant technology ensure a reliable supply chain
- + Proven performance – Our Cholesterol enzymes have been used in multiple biosensor and clinical chemistry applications
- + Complimentary reagents – peroxidase and a range of other enzymes available



Order your evaluation sample today [www.bbisolutions.com](http://www.bbisolutions.com)

**Product Analysis**

Code	Batch	Activity	Protein Concentration	Associated Activity
CE2	260B	47.6 U/mg material 54.1 U/mg protein	0.880 mg protein/mg material	Chymotrypsin: 0.5% Glucose Oxidase: 0.001% Trypsin: <0.5% Uricase: 0.001%
CE4F	34	135.6 U/mg material		Catalase: <0.1%
C05F	29	19.1 U/mg material		Catalase: <0.1% Cholesterol Esterase: <0.01%

<b>Storage</b>	Store desiccated at -15°C or below.
<b>Stability</b>	CE2 – Stable for 4 years when stored in accordance with storage conditions. CE4F – Stable for 1 year when stored in accordance with storage conditions. C05F – Stable for 1 year when stored in accordance with storage conditions.

**ORDERING DETAILS - USE THE FOLLOWING CODES WHEN ORDERING**

Product	Code	Description	Source	Applications
Cholesterol Esterase	CE2	>35 U/mg material	Porcine Pancreas	Biosensor/Clinical Chemistry
	CE4F	>100 U/mg material	Pseudomonas sp.	Biosensor/Clinical Chemistry
Cholesterol Oxidase	C05F	>12 U/mg material	Microorganism	Biosensor/Clinical Chemistry

**Related Products**

Product	Code	Description
Glucose Oxidase	GO3A	~360 U/mg protein
	GO3B2	~360 U/mg protein
	GO3B3	~360 U/mg protein
Creatinase	CR1F	>9 U/mg material
Creatininase	CNN1	>500 U/mg material
Sarcosine oxidase	SO2F	>20 U/mg material
Uricase	U5	>4 U/mg material
Peroxidase	161451BBI	> 250 Pyrogallol U/mg
	161453BBI	> 100 Pyrogallol U/mg material
	161457BBI	> 200 Pyrogallol U/mg material
	HRP3C	>150 U/mg material
	HRP4	>250 U/mg material
	HRP4B	>250 U/mg material
	HRP4C	>250 U/mg material

Order a sample today sales@bbisolutions.com

Int: +44 (0) 1495 363000 USA: 1-207-797-5454 China: +860 216 104 2216