

ENZYMES

Cholesterol Esterase Type I (CEH I)

ORIGIN *Candida rugosa*.

CAT# 70-6201-01

EC# 3.1.1.13

SPECIFICATIONS

Appearance	Beige powder
CEH I Activity	1.90 - 3.30 U/mg powder 37°C
Lipase Activity	0.27 - 1.63 U/mg powder at 37°C
Protein	≤ 26.0%
Solution Quality	Clear solution, may contain a few small particles
Purity (SDS-PAGE)	Matches reference
Contaminants	Glucose Oxidase <0.002 U/mg powder

ASSAY PRINCIPLE

Cholesterol Esterase Type I (CEHI) catalyses the following reaction:



The generation of H_2O_2 is indirectly measured by the formation of quinoneimine dye at 500nm in the presence of peroxidase.

UNIT DEFINITION

One unit of activity is defined as the amount of enzyme that will catalyse the production of 1 micromole of cholesterol per minute at 37°C under standard assay method conditions.

APPLICATION

Used in the formulation of Cholesterol testing reagents.

CHARACTERISTICS

Molecular Weight:	107kDa
Isoelectric Point:	4.3 + 0.1
K _m value:	0.4 mM (Cholesteryl Linoleate)
Optimum pH (Fig. 1):	7.3 to 7.7
Optimum Temperature (Fig. 2):	35 - 37°C
pH Stability (Fig. 3):	4.5 to 7.5 (37°C for 1 hour)
Thermal Stability (Fig. 4):	Stable at 48°C and below (2 hours)

FIGURE 1: OPTIMUM pH

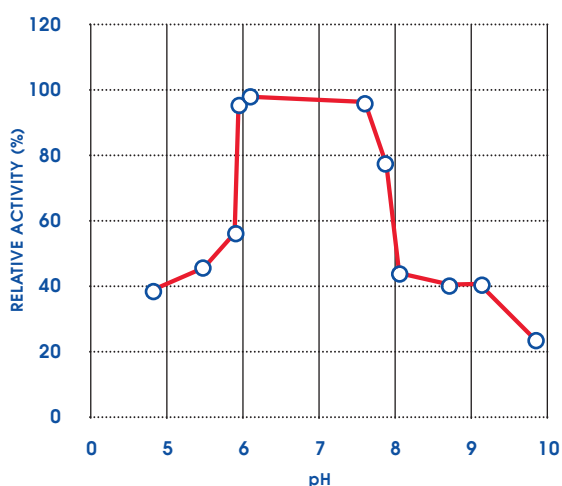


FIGURE 2: OPTIMUM TEMPERATURE

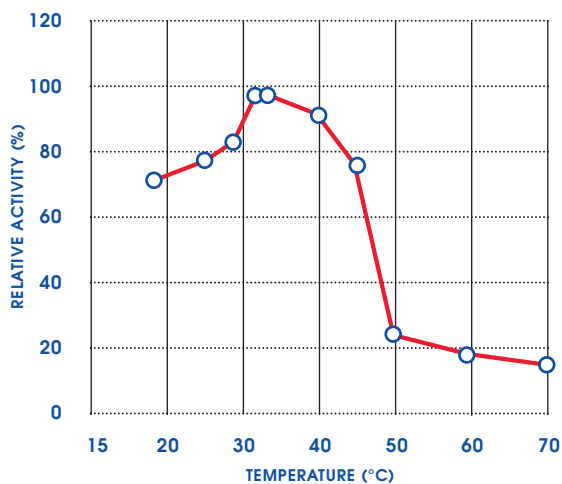


FIGURE 3: pH STABILITY

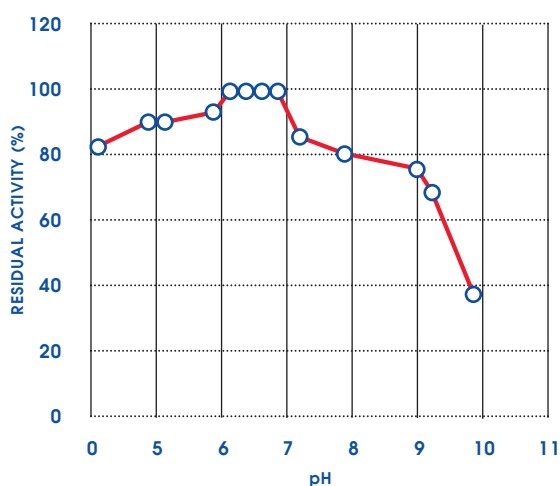
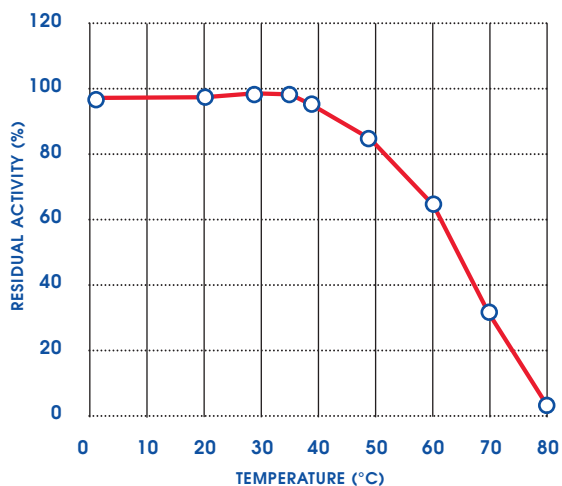


FIGURE 4: THERMAL STABILITY



THE AMERICAS

Sekisui Diagnostics, LLC
4 Hartwell Place
Lexington, MA 02421
Phone: 800 332 1042
Fax: 800 762 6311

INTERNATIONAL

Sekisui Diagnostics (UK) Limited
Liphook Way, Allington
Maidstone, Kent, ME16 0LQ, UK
Phone: +44 1622 607800
Fax: +44 1622 607801

SEKISUI
DIAGNOSTICS

Because every result matters™

engage@sekisuienzymes.com

www.sekisuienzymes.com