

# PORCINE LIVER ESTERASE

<b>EC Number</b>	3.1.1.1
<b>Alternative Names</b>	Carboxylesterase
<b>Assay Principle</b>	Ethyl Butyrate + H <sub>2</sub> O $\xrightarrow{\text{Esterase}}$ Butyric Acid + Ethanol
<b>Unit Definition</b>	That amount of enzyme with hydrolyses 1.0 $\mu$ mole of ethyl butyrate to butyric acid and ethanol per minute at 25°C and pH 8.0.

## What is Porcine Liver Esterase?

Porcine Liver Esterase (PLE) is used in Urinalysis controls as a partial substitute for Human Leukocyte Esterase.

Leukocyte esterase test is a urine test for the presence of white blood cells and other abnormalities associated with an infection of the urinary tract.

PLE acts on water-soluble carboxyl esters containing short chain fatty acids. PLE has a molecular weight of 168kDa.



Porcine Esterase is used in Urinalysis, Asymmetric Ester Hydrolysis, Research, Life Science and Assay Manufacturing.

Control manufacturers use porcine esterase for the detection of esterase levels in urine to indicate infection. It is also commonly used for kinetic resolutions and asymmetric synthesis in organic chemistry. In addition, in pharmaceutical and industrial applications it is used to catalyse the hydrolysis of pentaacetyl catechin and epicatechin.

## Key Benefits

### + COST-EFFECTIVE SOLUTION

PLE can provide a cost-effective alternative to human leukocyte esterase

### + SECURE RAW MATERIAL SOURCE

Our raw materials are obtained from veterinary approved European abattoirs

### + VALIDATED MANUFACTURING PROCESS

Ensuring a high quality product through batch to batch consistency

### + ACCESS TO TECHNICAL SUPPORT

Over 60 years enzyme manufacturing experience

### + BULK QUANTITIES

Manufacturing scale up capabilities in order to meet customer and market demands

Order your evaluation sample today

**WHY CHOOSE BBI'S FOR YOUR SUPPLY?**

Working with BBI, you can be confident in the safe and secure supply of our raw materials, obtained from veterinary approved European abattoirs.

Our manufacturing processes are validated, so that we can ensure a high quality product through batch to batch consistency. Our facilities provide bulk order manufacturing scale up capabilities in order to meet customer and market demands.

With over 60 years enzyme manufacturing experience our technical support and expertise is unparalleled. We pride ourselves on working closely with customers to ensure they get the most success from our products.

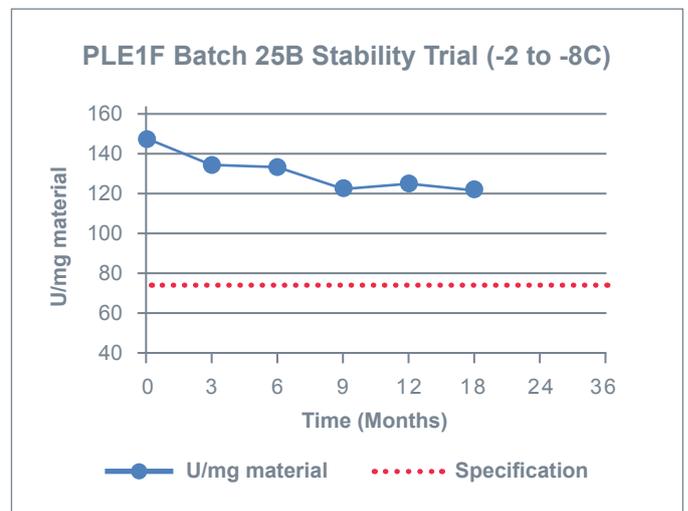
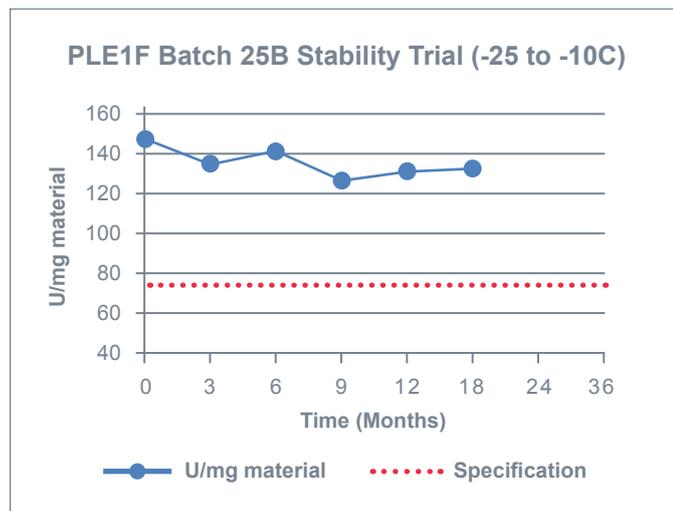
**Product Analysis**

AN EXAMPLE OF TYPICAL BATCH DATA

Parameter	Specification	Result
Activity	≥ 75 U/mg material	97.9 U/mg

**Stability Studies**

Formal stability studies ongoing. PLE is stable for 18 months from -25°C to 8°C.



ORDERING DETAILS - USE THE FOLLOWING CODES WHEN ORDERING

Product	Code
Porcine Liver Esterase (PLE)	PLE1F >75 U/mg material Porcine Liver Urine Test Strips

Order a sample today [sales@bbisolutions.com](mailto:sales@bbisolutions.com)  
 Int: +44 (0) 1495 363000 USA: 1-207-797-5454 China: +860 216 104 2216