Creative Enzymes®

Native Human Leukocyte Esterase, Unsonicated

Cat. No. NATE-0967

Lot. No. (See product label)

Introduction

Description	Leukocyte Esterase is used in a urine test for presence of white blood cells abnormalities associated with infection. Urine tests reveal the presence of granulocyte esterases. The esterases cleave a derivatized pyrazole amino acid ester to liberate derivatized hydroxy pyrazole. This pyrazole then reacts with a diazonium salt to produce a purple color. White blood cells in the urine usually indicate a urinary tract infection. Human leukocytes esterase test detects human esterase, an enzyme released by white blood cells. Human White blood cells are produced in the bone marrow and help to defend the body against infectious disease and foreign materials as part of the immune system. Human Leukocytosis is very common in acutely ill patients. It occurs in response to a wide variety of conditions, including viral, bacterial, fungal, or parasitic infection, cancer, and exposure to certain medications or chemicals. Human leukocytes are used in routine dipstick tests and urine controls. If this Human leukocyte test is positive, the urine should be examined microscopically for the presence of white blood cells and other abnormalities associated with infection.
Applications	Diagnostic Controls, Calibrators & Standards; Immunoassays; Clinical Chemistry; Testing/Assay Validation; Life Science; Validation Studies; Characterization; Manufacturing; Urinalysis
Synonyms	Unsonicated White Blood Cell Esterase; WBC Esterase

Product Information

Species	Human
Source	Human Leukocytes
Appearance	Milky, off-white suspension
Form	Suspension in 154 mM sodium chloride.
Activity	5.0 - 6.0 U/mL
Unit Definition	One unit will catalyze the hydrolysis of one micromole of methoxy succinyl-alanine-proline-valine-p-nitroanilide per minute at 37°C and pH 7.5 (In the presence of 500 mM sodium chloride and 0.2% Triton X-100)

Storage and Shipping Information

Storage	Store at -20°C
Stability	2 years