TECHNICAL BULLETIN

□NEW TEST □ TEST CHANGE

NOTIFICATION DATE: 04/23/2025 EFFECTIVE DATE: 04/28/2025

Alanine Aminotransferase (ALT)

On the effective date, Northwell Health Laboratories will implement an improved test for measuring alanine aminotransferase (ALT) enzyme activity. This new test includes pyridoxal-5-phosphate (vitamin B6) activation.

Pyridoxal-5-phosphate acts as an essential cofactor in the amino transfer reaction necessary for aminotransferase enzyme activity. By incorporating pyridoxal-5-phosphate into the test reagent, we can prevent inaccurately low ALT results in samples from patients with insufficient endogenous pyridoxal phosphate, such as those with a vitamin B6 deficiency.

A method comparison study conducted at Northwell Health Laboratories revealed a strong positive correlation between the new and existing tests, with a correlation coefficient greater than 0.98.

Test Requirement	New	Current
Assay Methodology	Alanine Aminotransferase with pyridoxal phosphate activation	Alanine Aminotransferase without pyridoxal phosphate activation
Specimen Type	Serum or Plasma	Serum or Plasma
Specimen Volume	1 mL Serum or Plasma (min 0.5 mL)	1 mL Serum or Plasma (min 0.5 mL)
Reference Interval	Female: 10 – 40 U/L Male: 10 – 50 U/L	10 – 45 U/L
Computer Interface Code	PDM # 5300135	PDM # 5300135
Test Order	SGPT	SGPT

If you have any questions, please contact Client Services at (800) 472-5757.

