

Malate Dehydrogenase (MDH)

Product Information

Cat#	TRA-041
Specification	2KU,100KU,1000KU
Description	Malate dehydrogenase (MDH) acts as a coenzyme in the core reaction of transaminase (ALT/AST) diagnostic kits, enabling quantitative detection by catalyzing the interconversion of malate and oxaloacetate.
Applications	Used for the research, development, and large-scale preparation of aspartate aminotransferase reagents.
Enzyme Commission Number	EC 1.1.1.37
Form	White, amorphous freeze-dried powder
Activity	≥ 1300.0 U/mg
Unit Definition	One unit is defined as the amount of enzyme required to consume 1 μmol of NADH per minute under the following reaction conditions.
Molecular Weight	35 kDa
Optimum pH	8.0-9.0
Optimum temperature	60°C
pH Stability	4.0-9.0 (25°C, 16 h)
Thermal Stability	< 50°C (pH 7.5, 30 min)
Isoelectric Point	5.61
Km Value	7.8×10 ⁻⁵ M (Oxaloacetate), 1.2×10 ⁻⁴ M (NADH)
Inhibitors	Hg ²⁺
Storage	Store at -25°C to -15°C for 12 months (retaining at least 90% activity)