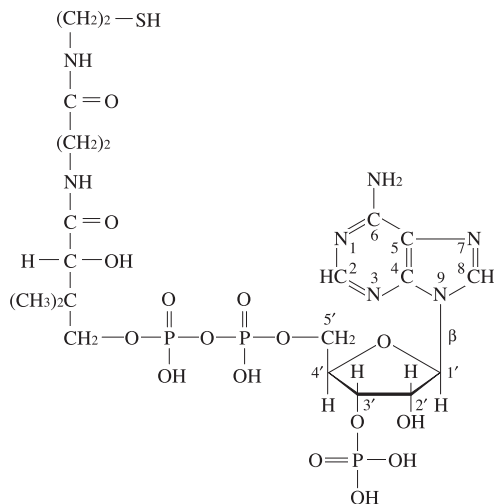


Co A

Coenzyme A (free acid)
Co A-SH (free acid)
from Yeast

Structure



Formula : C₂₁H₃₆N₇O₁₆P₃S

Formula weight : 767.5

Specification

Purity

Determined by Enzymatic Method (PTA)

Water Content

UV Spectral Analysis

Ratio at pH 7.5

$$A_{250}/A_{260}$$

$$A_{280}/A_{260}$$

Specifications

≥ 75%

< 8%

0.78 ± 0.03

0.16 ± 0.03

Assay Procedure

I . Spectrophotometric Method

Wavelength ; 233 nm, Light path length ; 1 cm

Pipette the following reagents into a cuvette

	a	b
Tris-HCl (0.1 mol/L, pH 7.5)	4.00 mL	4.00 mL
Ac-P (20 mg/mL)	0.20 mL	0.20 mL
CoA (1.0 mg/mL)	0.50 mL	0.50 mL
PTA*	0.01 mL	—
*Phosphotransacetylase (5,000 IU/mL)		

II . Calculation

$$\frac{\Delta A \cdot V \cdot MW \times 100}{4.44 \times 10^3 \cdot d \cdot v \cdot s} \times \frac{100}{(100 - W)} = \text{Purity of CoA}$$

$\Delta A = A_a - A_b$

V = Total volume of reaction mixture (4.71 mL)

MW = 767.5, as of anhydrate

4.44×10^3 = Molar extinction coefficient of Acetyl-CoA at 233 nm ($L \cdot mol^{-1} \cdot cm^{-1}$)

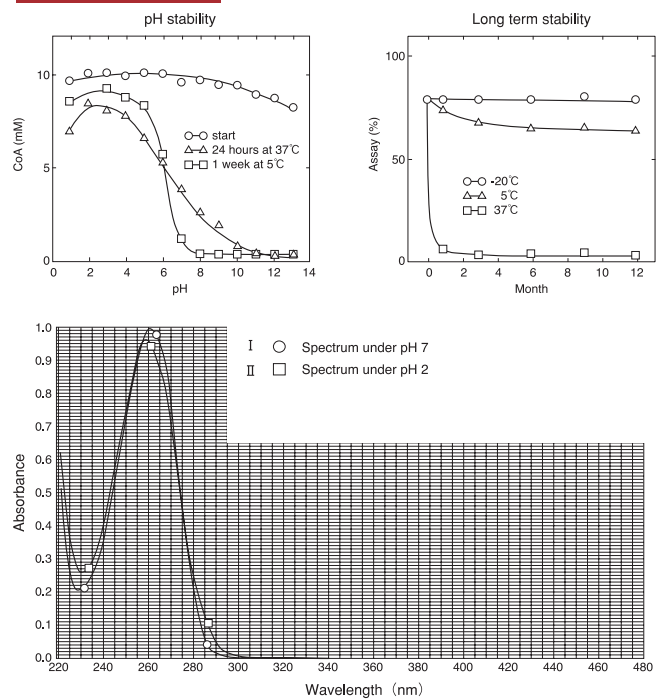
d = Light path length (1 cm)

v = Sample volume (0.5 mL)

s = Sample concentration (1.0 mg/mL)

W = Water Content (%)

Reference Data



Storage

Keep tightly stoppered in the dark below 5°C.
For prolonged storage keep below -20°C.

OYC No./Package

OYC No.	Package
45150000	100 mg
45152000	1 g
45152900	Bulk

(Research reagent use only, not for medical use.)

