

TEST NAME	β-hydroxybutyrate/Acetoacetate
TEST CODE	ACETO
LOINC	72603-4, 50099-1
CPT	82010, 80500
PANEL COMPONENTS	β -hydroxybutyrate, acetoacetate, & β -hydroxybutyrate/acetoacetate ratio
SYNONYMS	β -hydroxybutyrate/acetoacetate ratio
TEST INDICATION	For diagnostic testing of fasting hypoglycemia or after an oral fat tolerance test. The ratio of b-hydroxybutyrate (BOHB) / acetoacetate (AcAc) reflects mitochondrial NAD/NADH, and may be a useful parameter for diagnosis of defects of the Krebs cycle, as a parameter of lipolysis and fatty acid oxidation or to monitor efficacy of ketogenic diets.
METHOD DESCRIPTION	Spectrophotometric enzymatic assays.
COLLECT	[REDACTED]
SPECIMEN REQUIREMENTS	Collect 0.5-1 ml blood in an EDTA tube (lavender top), mix gently, and centrifuge as soon as possible after collection. Then transfer the plasma into a polypropylene tube and freeze.
SAMPLE	Plasma or serum
CONTAINER	EDTA plasma (no gel separator), serum red top (no gel separator)
PREFERRED VOLUME	500 μ l
MINIMUM VOLUME	200 μ l
TRANSPORT	[REDACTED]
SAMPLE	Plasma or serum
PREFERRED VOLUME	500 μ l
MINIMUM VOLUME	200 μ l
TEMPERATURE	Frozen on dry ice
HANDLING	Blood should be centrifuged soon after collection and the separated plasma or serum should be frozen at -20°C until assayed. Acetoacetate is less stable than β -OHB, therefore plasma or serum should not be stored longer than 24 hours at 5°C before freezing.
SHIPPING INSTRUCTIONS	Ship on dry ice
SPECIAL INSTRUCTIONS	Ship overnight
PERFORMED	UHCMC; Mon-Fri
TURN AROUND TIME	5-7 business days