

CERTIFICATE OF ANALYSIS

PRODUCT NAME:	Acetoacetic Acid Lithium Salt
APPEARANCE:	White Powder
CAS NO:	3483-11-2
CAT. NO:	I905-10
EXPIRATION:	5 Years After Manufactured Date
FORM:	Crystalline
FORMULA:	C ₄ H ₅ LiO ₃
LITHIUM CONTENT:	>6%
MOLECULAR WEIGHT:	108.00
PURITY:	>95% Pure
SOLUBILITY:	Solubility(5% In Water), Clear, Colorless
STORAGE:	Below -20° C
SYNONYMS:	Lithium Acetoacetate

Urine Ketone indicator: Acetoacetic Acid Lithium Salt for Ketone tests in BULK QUANTITIES from 1000gram to 25kgs. Custom fills for Acetoacetic Acid available.

Urine Ketone: acetoacetic acid is used for Ketone sensitivity in Urine Test strips.

Ketone Chemical Principle: Legal's test-nitroprusside reaction. Use Acetoacetic acid in an alkaline medium that reacts with nitroferricyanide to produce a color change from beige to purple on the urine strip.

Urine Ketone(s) such as(beta-hydroxybutyric acid, acetoacetic acid, and acetone) are the end- product of rapid or excessive fatty acid breakdown. Its important to note that only acetoacetic acid reacts with sodium nitroprusside reagent. As with glucose, ketone(s) are present in the urine when the blood levels surpass a certain threshold. Fatty acid release from adipose tissue is stimulated by a number of hormones including glucagon, epinephrine, and growth hormone. The levels of these hormones are increased in starvation, uncontrolled diabetes mellitus, and a number of other conditions.



A positive test for urine ketone(s) may indicate: Metabolic abnormalities, including uncontrolled diabetes or glycogen storage disease, Abnormal nutritional conditions, including starvation, fasting, anorexia, high protein or low carbohydrate diets, Protracted vomiting, including hyperemesis gravidarum, Ketone testing also indicate Disorders of increased metabolism, including hyperthyroidism, fever, acute or severe illness, burns, pregnancy, lactation or post-surgical condition.

Urine Ketone Test is based on the reaction of acetoacetic acid in the urine with nitroprusside. The resulting color ranges in a keytone test from tan when no reaction takes place, to purple for a positive reaction. In keytone testing Normal urine specimens ordinarily yield negative results with this reagent

Acetoacetic Acid Research:

Enzymic determination of d(-)- β -hydroxybutyric acid and acetoacetic acid in blood. acetoacetic REF: Biochem J. 1962 January; 82(1): 90-96

A novel pyrroline-5-carboxylic acid and acetoacetic acid adduct in hyperprolinaemia type II.acetoacetic REF:in Chim Acta. 2003 May

Uncatalyzed and Amine Catalyzed Decarboxylation of Acetoacetic Acid:Acetoacetic REF:Bioorganic Chemistry, Volume 30, Number 1, February 2002, pp. 32-52 Acetoacetic

Our Acetoacidic acid lithium salt is used in urinalysis as a keytone indicator worldwide.