

# Creatinine

Catalog No: tcsc2705



## Available Sizes

Size: 1g

Size: 5g



## Specifications

**CAS No:**

60-27-5

**Formula:**

$C_4H_7N_3O$

**Pathway:**

Metabolic Enzyme/Protease

**Target:**

Endogenous Metabolite

**Purity / Grade:**

>98%

**Solubility:**

H<sub>2</sub>O : ≥ 100 mg/mL (884.02 mM)

**Alternative Names:**

NSC13123

**Observed Molecular Weight:**

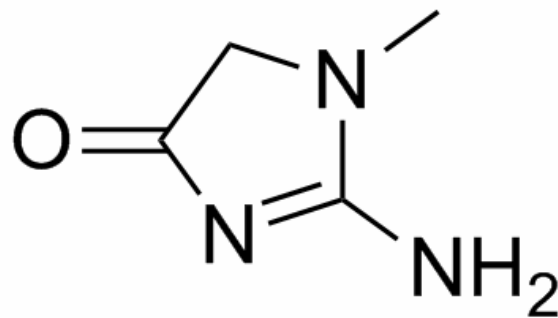
113.12

## Product Description

Creatinine(NSC13123) is a break-down product of creatine phosphate in muscle, and is usually produced at a fairly constant rate by the body.

Target: Others

Creatinine is a breakdown product of creatine phosphate in muscle, and is usually produced at a fairly constant rate by the body (depending on muscle mass). Creatine is synthesized primarily in the liver from the methylation of glycocyamine (guanidino acetate, synthesized in the kidney from the amino acids arginine and glycine) by S-adenosyl methionine. It is then transported through blood to the other organs, muscle, and brain, where, through phosphorylation, it becomes the high-energy compound phosphocreatine. During the reaction, creatine and phosphocreatine are catalyzed by creatine kinase, and a spontaneous conversion to creatinine may occur [1]. Creatinine levels in blood and urine may be used to calculate the creatinine clearance (CrCl), which reflects the glomerular filtration rate (GFR), an important clinical index of renal function [2].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!