
Lab Dept: Chemistry

Test Name: CREATINE KINASE

General Information

Lab Order Codes: CPK

Synonyms: CK; Creatine Phosphokinase; CPK

CPT Codes: 82550 – Creatine kinase (CK), (CPK), total

Test Includes: Creatine Kinase concentration reported in U/L.

Logistics

Test Indications: Creatine kinase activity is useful in evaluating diseases of the heart, skeletal muscle, and brain.

Lab Testing Sections: Chemistry

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 2 hours

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container: Green top (Li Heparin) tube **preferred**
Alternate tube: SST (Red, marble or gold top tube)

Draw Volume: 0.6 mL blood

Processed Volume: 0.2 mL serum/plasma

Collection: Routine venipuncture. Mix tubes containing anticoagulant by gentle inversion.

Special Processing: Lab Staff: Centrifuge specimen, remove serum/plasma aliquot into plastic sample cup. Analyze sample immediately or store at refrigerated temperatures.

Patient Preparation: None

Sample Rejection: Mislabeled or unlabeled specimen

Interpretive

Reference Range:

Age	Female Range (U/L)	Male Range (U/L)
0 – 12 years:	68 - 293	68 - 293
13 – 18 years:	48 - 200	80 - 354
Adult:	29 - 168	30 - 200

Critical Values: >4000 U/L

Limitations: Moderate or severely hemolyzed specimens can liberate adenylate kinase, ATP, and G-6-P which may affect the lag phase and side reactions of the CK assay system.

Methodology: NAC (N-acetyl-L-cysteine)

References: Jacobs and DeMott Laboratory Test Handbook (2001) Lexi-Comp, Inc., Hudson, OH, 5th ed

Abbott Alinity c Creatine Kinase Reagent Kit Instructions for Use, Abbott Laboratories Diagnostics Division, Abbott Park, IL, 60064, USA. February 2018

Bio-Rad Liquichek Multiquel 1,2,3 Unassayed Chemistry Control Package Insert, Bio-Rad Laboratories, Irvine, CA, 92618, USA

CALIPER Reference Range Study, accessed October 27, 2020

Updates: 7/10/2007: Critical value added.
12/22/2011: Turnaround time updated, previously listed as 4 hours.
2/8/2016: Update alt tube types.
7/8/2016: Updated limitations.
12/8/2020: Updated for method Abbott Alinity, removed method Siemens Vista