

---

**Lab Dept:** Chemistry

**Test Name:** CREATINE KINASE ISOENZYMES

---

***General Information***

**Lab Order Codes:** CKISO

**Synonyms:** CK fractionation; CK isoenzymes; CKBB CKMB CKMM; CPK Isoenzymes; CK macro

**CPT Codes:** 82552 - CK isoenzymes  
82550 - CK, total

**Test Includes:** CK-MM, CK-MB, CK-BB, CK Macro Type I, CK Macro Type II and CK total values in U/L.

---

***Logistics***

**Test indications:** Aid in determining the etiology of elevated total creatine kinase. Troponin I or Troponin T 5th Generation are the recommended tests for diagnosis and management of acute coronary syndrome. May aid in identifying the presence of macro creatine kinase.

**Lab Testing Sections:** Chemistry - Sendouts

**Referred to:** ARUP (Test code: 0020414)

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 2-3 days

**Special Instructions:** N/A

---

***Specimen***

**Specimen Type:** Blood

**Container:** SST (Gold, marble or red) or plain red tube

**Draw Volume:** 3 mL (Minimum: 1.5 mL) blood

**Processed Volume:** 1 mL (Minimum: 0.5 mL) serum

**Collection:** Routine venipuncture

**Special Processing:** Lab Staff: Centrifuge specimen, remove serum aliquot immediately into a plastic screw-capped ARUP transport vial. Store and ship at frozen temperatures. Forward promptly.

Specimen stable frozen (preferred) for 1 month (avoid freeze/thaw cycles) or refrigerated for 1 week.

**Patient Preparation:** None

**Sample Rejection:** Mislabeled or unlabeled specimens; gross hemolysis; incorrect anticoagulant

---

***Interpretive***

**Reference Range:**

|                  |                    |            |              |
|------------------|--------------------|------------|--------------|
| CK-MM            | 96-100%            |            |              |
| CK-MB            | 0-4%               |            |              |
| CK-BB            | 0%                 |            |              |
| CK-Macro Type I  | 0%                 |            |              |
| CK-Macro Type II | 0%                 |            |              |
| CK Total         | Age                | Male (U/L) | Female (U/L) |
|                  | 0-30 days          | 108-564    | 108-564      |
|                  | 31 days-5 months   | 72-367     | 72-367       |
|                  | 6-35 months        | 50-272     | 38-261       |
|                  | 3-6 years          | 56-281     | 40-222       |
|                  | 7-17 years         | 60-393     | 46-250       |
|                  | 18 years and older | 39-308     | 26-192       |

**Critical Values:** N/A

**Limitations:** N/A

**Methodology:** Quantitative Enzymatic Assay/Electrophoresis

**References:** [ARUP Laboratories](#) (January 2024)

**Updates:** 1/24/2024: Initial entry. Replaced obsolete CKRE and CKI