



Product Data Sheet

Cat# RP-1059

Recombinant Human Creatine Kinase MB Isoenzyme Type-1

Size: 10 ug

The three isoenzymes (MM, MB, and BB) are found in muscle, cardiac and brain tissues. These recombinant proteins are ideal for calibrating diagnostic instruments and researching neuromuscular diseases. Creatine Kinases can be used for indications in many neuromuscular applications. These disorders include cardiac disease, mitochondrial disorders, inflammatory myopathies, myasthenia, polymyositis, McArdle's disease, NMJ disorders, muscular dystrophy, ALS, hypo and hyperthyroid disorders, central core disease, acid maltase deficiency, myoglobinuria, rhabdomyolysis, motor neuron diseases, rheumatic diseases, and other that create elevated or reduced levels of Creatine Kinases.

**Source:** Pichia Pastoris. CKMBITI Human Recombinant produced in Pichia Pastoris is a glycosylated polypeptide chain having an identical amino acid sequence compared to the native enzyme, purified under non-denaturing conditions and reacts with polyclonal antibodies to MB Isoenzyme in ELISA. The CKMBITI is purified by proprietary chromatographic techniques. The protein (10 mg/ml) contains 20mM Sodium Phosphate, pH-8.

**Applications and Suggested Dilutions:** Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE. Users must optimize the appropriate concentration and conditions for each assay.

**Storage and Stability:** CKMBITI although stable at 15°C for 7 days, should be stored desiccated below -18°C. If supplied in powder then reconstitute it in 100 ul water for 1 mg/ml stock and store in liquid at 4°C for ~1 week or aliquots in suitable size and store at -20°C for long term storage.

**Please prevent freeze-thaw cycles.**

**Biological Activity:** The biological activity measured by the enzymatic activity of Creatine phosphokinase procedure No.45-UV, 1IU-1  $\mu$ mole creatine phosphate was 500 IU/mg at 37 degrees celsius

**Usage:**

This item is for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals

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