

Product specifications

Name	Anti-h CK-MB 7501 SPRN-5
Specificity	Antibody recognizes human creatine kinase MB isoenzyme
Description	Monoclonal mouse antibody, cultured <i>in vitro</i> under conditions free from animal-derived components.
Product code	100630
Product buffer solution	37 mM citrate, 125 mM phosphate, pH 6.0, 0.9 % NaCl, 0.095 % NaN ₃ as a preservative
Shelf life and storage	24 months from manufacturing at 2–8 °C
Subclass	IgG ₁
Analyte description	Creatine kinase (CK), also known as creatine phosphokinase (CPK) or phospho-creatine kinase is an enzyme (EC 2.7.3.2) expressed by various tissues and cell types. In the cells, the "cytosolic" CK enzymes consist of two subunits, which can be either B (brain type) or M (muscle type). There are, therefore, three different isoenzymes: CK-MM, CK-BB and CK-MB. CK is often determined routinely in emergency patients. In addition, it is determined specifically in patients with chest pain and if acute renal failure is suspected. Elevation of CK is an indication of damage to muscle. It is therefore indicative of injury, rhabdomyolysis, myocardial infarction, muscular dystrophy, myositis, myocarditis, malignant hyperthermia, and neuroleptic malignant syndrome. Lowered CK can be an indication of alcoholic liver disease and rheumatoid arthritis.

Parameters tested on each lot

Product appearance	Liquid, may turn slightly opaque during storage
Product concentration	5.0 mg/ml (+/- 10 %)
Immunoreactivity	80–120 % compared to the reference sample in an FIA test
IEF Profile	6.7–8.0
Purity	≥ 95 %

Kinetic parameters

Association rate constant	Not Determined (N/D)
Dissociation rate constant	N/D
Affinity constant	$K_A = 2 \times 10^9$ 1/M
Determination method	Radioimmunoassay (RIA)
Determination antigen	CK-MB, Scripps Laboratories (Cat C1224, Lot 624164)

Cross-reactivities CK-BB isoenzyme 182 % (Scripps Laboratories, Cat C1124, Lot 118164)
CK-MM isoenzyme 7.3 % (Scripps Laboratories, Cat C1324, Lot 406164)

Epitope N/D

Pair recommendations

		DETECTION	
		7501	7502
CAPTURE	7501	-	+
	7502	-	-

Please note that pair recommendations are based on results obtained by our laboratory. Equally good results may be obtained using other pairs and therefore these recommendations are only indicative.

Platforms tested FIA

Antigens tested Recombinant CK-MB antigen, Lee Biosolutions 190-24-R2, and native CK-MB antigen Lee Biosolutions 190-24 and 190-24A.

Product stability	TEMPERATURE, TIME	RESULT
	-70 °C, 21 days	N/D
	-20 °C, 21 days	N/D
	+4 °C, 21 days	N/D
	+35 °C, 7 days	N/D
	+35 °C, 21 days	N/D
	+45 °C, 3 days	N/D
	+45 °C, 7 days	N/D

Stability testing is performed in the product buffer to see whether different temperatures affect the antigen binding, charge or composition of the antibody. Please note that the shelf life given on the first page is based on real time stability testing at 2–8 °C in the product buffer.

Miscellaneous -

References -

