

# Product datasheet

info@arigobio.com

# ARG57033 anti-CKMT1A antibody [17A2]

Package: 50 μl Store at: -20°C

#### **Summary**

Product Description Mouse Monoclonal antibody [17A2] recognizes CKMT1A

Tested Reactivity Hu

Tested Application FACS, WB
Host Mouse

**Clonality** Monoclonal

Clone 17A2

Target Name IgG2b, kappa
CKMT1A

Species Human

Immunogen Recombinant fragment around aa. 40-417 of Human CKMT1A.

Conjugation Un-conjugated

Alternate Names CKMT1; U-MtCK; mia-CK

### **Application Instructions**

Application table	Application	Dilution
	FACS	Assay-dependent
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

#### **Properties**

Form Liquid

Purification Purification with Protein A.

Buffer PBS (pH 7.4), 0.02% Sodium azide and 10% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 10% Glycerol

Concentration 1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Database links GeneID: 548596 Human

Swiss-port # P12532 Human

Gene Symbol CKMT1A

Gene Full Name creatine kinase, mitochondrial 1A

Background Mitochondrial creatine (MtCK) kinase is responsible for the transfer of high energy phosphate from

mitochondria to the cytosolic carrier, creatine. It belongs to the creatine kinase isoenzyme family. It exists as two isoenzymes, sarcomeric MtCK and ubiquitous MtCK, encoded by separate genes. Mitochondrial creatine kinase occurs in two different oligomeric forms: dimers and octamers, in contrast to the exclusively dimeric cytosolic creatine kinase isoenzymes. Many malignant cancers with poor prognosis have shown overexpression of ubiquitous mitochondrial creatine kinase; this may be related to high energy turnover and failure to eliminate cancer cells via apoptosis. Ubiquitous mitochondrial creatine kinase has 80% homology with the coding exons of sarcomeric mitochondrial creatine kinase. Two genes located near each other on chromosome 15 have been identified which

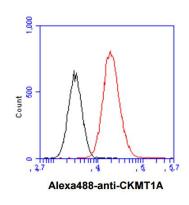
encode identical mitochondrial creatine kinase proteins. [provided by RefSeq, Jul 2008]

Function Reversibly catalyzes the transfer of phosphate between ATP and various phosphogens (e.g. creatine

phosphate). Creatine kinase isoenzymes play a central role in energy transduction in tissues with large, fluctuating energy demands, such as skeletal muscle, heart, brain and spermatozoa. [UniProt]

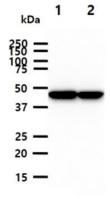
Calculated Mw 47 kDa

#### **Images**



#### ARG57033 anti-CKMT1A antibody [17A2] FACS image

Flow Cytometry: HeLa cell line stained with ARG57033 anti-CKMT1A antibody [17A2] at 2-5 µg for 1x10^6 cells (red line). Secondary antibody: Goat anti-Mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was Mouse IgG (black line).



## ARG57033 anti-CKMT1A antibody [17A2] WB image

Western blot: 40  $\mu g$  of 1) 293T cell lysate, and 2) HeLa cell lysate stained with ARG57033 anti-CKMT1A antibody [17A2] at 1:1000.