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#8169

## Hexokinase II (3D7) Mouse mAb

**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R Mk	Endogenous	102	Mouse IgG1	#P52789	3099

### Product Usage Information

#### Application

Western Blotting

#### Dilution

1:1000

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

### Specificity/Sensitivity

Hexokinase II (3D7) Mouse mAb recognizes endogenous levels of total hexokinase II protein.

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly332 of human hexokinase II protein.

### Background

Hexokinase catalyzes the conversion of glucose to glucose-6-phosphate, the first step in glycolysis. Four distinct mammalian hexokinase isoforms, designated as hexokinase I, II, III, and IV (glucokinase), have been identified. Hexokinases I, II, and III are associated with the outer mitochondrial membrane and are critical for maintaining an elevated rate of aerobic glycolysis in cancer cells (Warburg Effect) (1) in order to compensate for the increased energy demands associated with rapid cell growth and proliferation (2,3).

### Background References

1. WARBURG, O. (1956) *Science* 123, 309-14.
2. Semenza, G.L. (2000) *Crit Rev Biochem Mol Biol* 35, 71-103.
3. Smith, T.A. (2000) *Br J Biomed Sci* 57, 170-8.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

### Applications Key

**W:** Western Blotting

### Cross-Reactivity Key

**H:** Human **M:** Mouse **R:** Rat **Mk:** Monkey

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