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Store at -20C  
#3683

## GAPDH (14C10) Rabbit mAb (HRP Conjugate)

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

<b>Applications:</b> W	<b>Reactivity:</b> H M R Mk B Pg	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 37	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #P04406	<b>Entrez-Gene Id:</b> 2597
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### Product Usage Information

#### Application

Western Blotting

#### Dilution

1:1000

### Storage

Supplied in 136 mM NaCl, 2.6 mM KCl, 12 mM sodium phosphate (pH 7.4) dibasic, 2 mg/ml BSA, and 50% glycerol. Store at -20°C. Do not aliquot the antibodies.

### Specificity/Sensitivity

GAPDH (14C10) Rabbit mAb (HRP Conjugate) detects endogenous levels of total GAPDH protein.

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide near the carboxy terminus of human GAPDH. The antibody is conjugated to the carbohydrate groups of horseradish peroxidase (HRP) via its amine groups.

### Description

This Cell Signaling Technology antibody is conjugated to the carbohydrate groups of horseradish peroxidase (HRP) via its amine groups. The unconjugated GAPDH (14C10) Rabbit mAb #2118 reacts with human, mouse, rat and monkey GAPDH. CST expects that GAPDH (14C10) (HRP conjugate) #3683 will also recognize GAPDH in these species.

### Background

Glyceraldehyde-3-phosphate dehydrogenase (GAPDH) catalyzes the phosphorylation of glyceraldehyde-3-phosphate during glycolysis. Though differentially expressed from tissue to tissue (1), GAPDH is thought to be a constitutively expressed housekeeping protein. For this reason, GAPDH mRNA and protein levels are often measured as controls in experiments quantifying specific changes in expression of other targets. Recent work has elucidated roles for GAPDH in apoptosis (2), gene expression (3), and nuclear transport (4). GAPDH may also play a role in neurodegenerative pathologies such as Huntington and Alzheimer's diseases (4,5).

### Background References

1. Barber, R.D. et al. (2005) *Physiol. Genomics* 21, 389-95.
2. Hara, M.R. and Snyder, S.H. (2006) *Cell Mol. Neurobiol.* 26, 527-38.
3. Zheng, L. et al. (2003) *Cell* 114, 255-66.
4. Bae, B.I. et al. (2006) *Proc. Natl. Acad. Sci. USA* 103, 3405-9.
5. Wang, Q. et al. (2005) *FASEB J.* 19, 869-71.

### 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 nonfat dry milk, 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 **B:** Bovine **Pg:** Pig

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