

Store at
-20°C

GAPDH (14C10) Rabbit mAb

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#2118

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orders@cellsignal.com**Entrez-Gene ID** #2597
UniProt ID #P04406

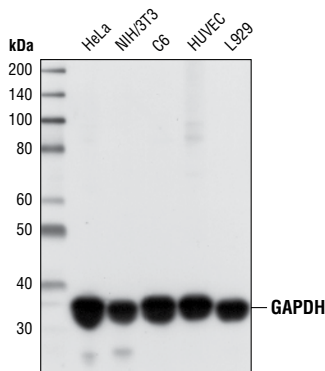
rev. 06/03/16

For Research Use Only. Not For Use In Diagnostic Procedures.**Applications**
W, IHC-P, IF-IC, F
Endogenous**Species Cross-Reactivity***
H, M, R, Mk, B, (Pg)**Molecular Wt.**
37 kDa**Isotype**
Rabbit IgG**

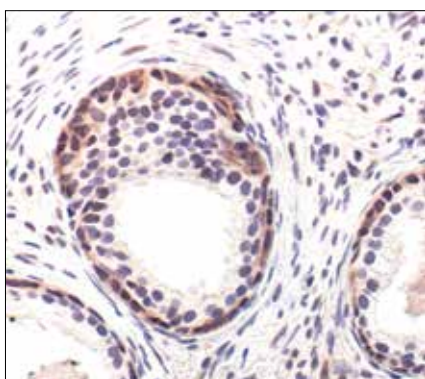
Background: Glyceraldehyde-3-phosphate dehydrogenase (GAPDH) catalyzes the phosphorylation of glyceraldehyde-3-phosphate during glycolysis. Though differentially expressed from tissue to tissue (1), GAPDH is thought to be a constitutively expressed housekeeping protein. For this reason, GAPDH mRNA and 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).

Specificity/Sensitivity: GAPDH (14C10) Rabbit mAb detects endogenous levels of total GAPDH protein.

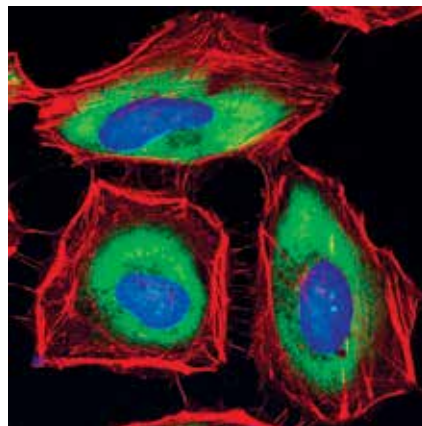
Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide near the carboxy terminus of human GAPDH.



Western blot analysis of extracts from various cell lines using GAPDH (14C10) Rabbit mAb.



Immunohistochemical analysis of paraffin-embedded human prostate carcinoma using GAPDH (14C10) Rabbit mAb.



Confocal immunofluorescent analysis of HeLa cells using GAPDH (14C10) Rabbit mAb (green). Actin filaments have been labeled with Alexa Fluor® 555 phalloidin (red). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).

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.

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunohistochemistry (Paraffin)	1:800
Unmasking buffer:	Citrate
Antibody diluent:	SignalStain® Antibody Diluent #8112
Immunofluorescence (IF-IC)	1:100
Flow Cytometry	1:200

For product specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com

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.

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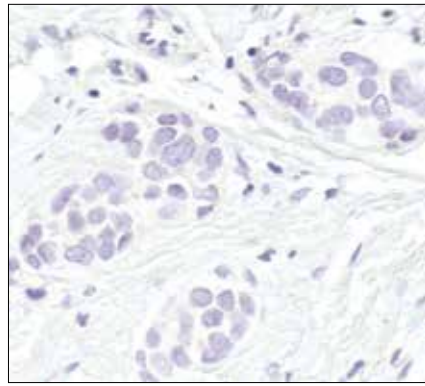
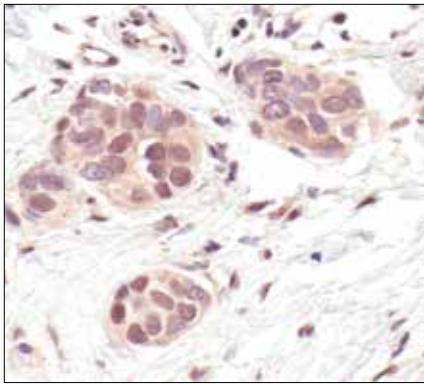
IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.

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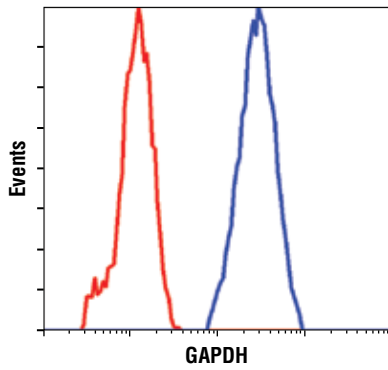
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Applications: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide **Species Cross-Reactivity:** H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected **Species** enclosed in parentheses are predicted to react based on 100% homology.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma using GAPDH (14C10) Rabbit mAb in the presence of control peptide (left) or antigen-specific peptide (right).



Flow cytometric analysis of HeLa cells using GAPDH (14C10) Rabbit mAb antibody (blue) compared to a nonspecific negative control antibody (red).