AFP (3H8) Mouse mAb

#3903 Store at -20°C

☑ 100 µl
(10 western blots)

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Entrez-Gene ID #174
Swiss-Prot Acc. #P02771

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IF-IC Endogenous	H, M	70 kDa	Mouse IgG2A**

Background: Alpha-fetoprotein (AFP) is a 65 kDa glycoprotein found in the serum of the mammalian fetal liver, yolk sac and GI tract. Expression of AFP in adult cells is low. However, synthesis aberrantly occurs in adult liver cancer cells (1,2). The tumor suppressor gene p53 and β-catenin are both involved in the regulation of AFP expression. In normal adult cells p53 binds to the repressor region of the AFP gene, thereby blocking transcription. Mutations in both p53 and β-catenin are associated with aberrant expression of AFP. Elevated serum levels are predictive of hepatocellular carcinoma (3).

Specificity/Sensitivity: AFP (3H8) Mouse mAb detects endogenous levels of total AFP protein.

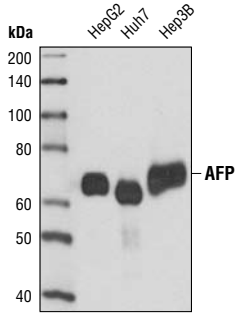
Source/Purification: Monoclonal antibody is produced by immunizing animals with a recombinant fragment of human AFP.

Background References:

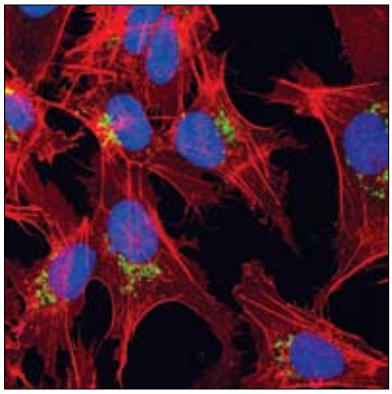
(1) Meier, V. et al. (2006) *Comp Hepatol* 5, 2.

(2) Warnes, T.W. and Smith, A. (1987) *Baillieres Clin Gastroenterol* 1, 63–89.

(3) Peng, S.Y. et al. (2004) *Int J Cancer* 112, 44–50.



Western blot analysis of extracts of various cell lines using AFP (3H8) Mouse mAb.



Confocal immunofluorescent analysis of HepG2 cells using AFP Mouse mAb (green). Actin filaments have been labeled with DY-554 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-mouse secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunofluorescence (IF-IC)	1:100

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted 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 **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide

Species Cross-Reactivity Key: **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.