#3810 Store at -20°C

Enolase-1 Antibody

☑ 100 µl
(10 western blots)

Cell Signaling TECHNOLOGY®

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Entrez-Gene ID #2023
Swiss-Prot Acc. #P06733

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IP Endogenous	H, M, R, Mk	47 kDa	Rabbit**

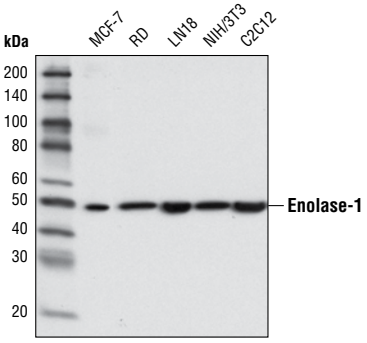
Background: Enolase is an important glycolytic enzyme involved in the interconversion of 2-phosphoglycerate to phosphoenolpyruvate. Mammalian enolase exists as three subunits: enolase-1 (α-enolase), enolase-2 (γ-enolase) and enolase-3 (β-enolase) that can form both homo- and heterodimers. Expression of the enolase isoforms differs in a tissue specific manner (1). Enolase-1 plays a key role in anaerobic metabolism under hypoxic conditions and may act as a cell surface plasminogen receptor during tissue invasion (2,3). Abnormal expression of enolase-1 is associated with tumor progression in some cases of breast and lung cancer (4-7). Alternatively, an enolase-1 splice variant (MBP-1) binds the c-myc promoter p2 and may function as a tumor suppressor. For this reason enolase-1 is considered as a potential therapeutic target in the treatment of some forms of cancer (8).

Specificity/Sensitivity: Enolase-1 Antibody detects endogenous levels of total enolase-1 protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the sequence of human enolase-1. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

(1) Pancholi, V. (2001) *Cell Mol Life Sci* 58, 902–20.
(2) Redlitz, A. et al. (1995) *Eur J Biochem* 227, 407–15.
(3) Jiang, B.H. et al. (1997) *Cancer Res* 57, 5328–35.
(4) Peebles, K.A. et al. (2003) *Carcinogenesis* 24, 651–7.
(5) Zhang, L. et al. (2000) *J Surg Res* 93, 108–19.
(6) Wu, W. et al. (2002) *Clin Exp Metastasis* 19, 319–26.
(7) Hennipman, A. et al. (1988) *Tumour Biol* 9, 241–8.
(8) Feo, S. et al. (2000) *FEBS Lett* 473, 47–52.



Western blot analysis of extracts from various cell types using Enolase-1 Antibody.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. 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
Immunoprecipitation	1:50

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 BSA, 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 **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.