

Store at
-20C
#41377**MTHFD2 (D8W9U) Rabbit mAb**

Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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

Applications: W, IP	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 35	Source/Isotype: Rabbit IgG	UniProt ID: #P13995	Entrez-Gene Id: 10797
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Product Usage Information**Application**

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:50

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

MTHFD2 (D8W9U) Rabbit mAb recognizes endogenous levels of total MTHFD2 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu340 of human MTHFD2 protein.

Background

MTHFD2 is a bifunctional methylenetetrahydrofolate dehydrogenase/cyclohydrolase involved in mitochondrial folate metabolism (1). MTHFD2 expression is developmentally regulated, as it is expressed in embryos but not in most adult tissues. Recent research studies have shown that MTHFD2 is consistently overexpressed in many cancer types and correlated with poor survival in breast cancer (2-5). Overexpression of MTHFD2 promotes cell proliferation while its depletion induces cell death in human cancer cells (6).

Background References

1. Christensen, K.E. and Mackenzie, R.E. (2008) *Vitam Horm* 79, 393-410.
2. Lehtinen, L. et al. (2013) *Oncotarget* 4, 48-63.
3. Nilsson, R. et al. (2014) *Nat Commun* 5, 3128.
4. Liu, F. et al. (2014) *Tumour Biol* 35, 8685-90.
5. Tedeschi, P.M. et al. (2015) *Mol Cancer Res* 13, 1361-6.
6. Gustafsson Sheppard, N. et al. (2015) *Sci Rep* 5, 15029.

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 **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human

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