

ZPR1 (LG1) Mouse mAb

✓ 100 µl
(10 western blots)

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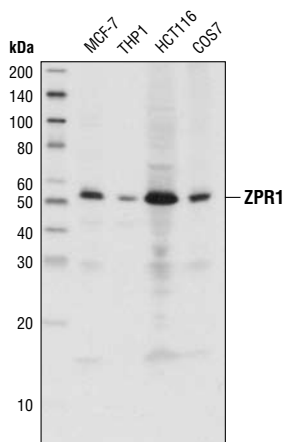
rev. 02/01/10

| Applications | Species Cross-Reactivity* | Molecular Wt. | Isotype |
|-----------------|---------------------------|---------------|--------------|
| W Endogenous | H, M, R, Mk | 51 kDa | Mouse IgG1** |

Background: The zinc finger protein ZPR1 (ZNF259) binds to epidermal growth factor receptor (EGFR) and is localized to both cytoplasm and nucleus. The zinc fingers found in ZPR1 and the tyrosine kinase domain of EGFR mediate the interaction between ZPR1 and the receptor (1). ZPR1 translocates from the cytoplasm to nucleus following mitogen (i.e. EGF) stimulation (2,3). ZPR1 also interacts with translation elongation factor eEF1A *in vivo* following EGF treatment (3). The interaction between the zinc finger protein and elongation factor is important for cell proliferation. Cells lacking ZPR1 exhibit abnormal nucleolar function, suggesting that ZPR1 is required for cell viability and nucleolar function in dividing cells (3). ZPR1 knockout mice exhibit significant neurodegeneration, and reduced or altered expression of ZPR1 may contribute to spinal muscular atrophy, a disorder characterized by degeneration of spinal cord neurons (4).

Specificity/Sensitivity: ZPR1 (LG1) Mouse mAb detects endogenous levels of total ZPR1 protein.

Source/Purification: Monoclonal antibody is produced by immunizing animals with purified recombinant human ZPR1.



Western blot analysis of extracts from various cell types using ZPR1 (LG1) Mouse mAb.

Entrez-Gene ID #8882
Swiss-Prot Acc. #075312

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

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.

Background References:

- (1) Galcheva-Gargova, Z. et al. (1996) *Science* 272, 1797-802.
- (2) Gangwani, L. et al. (1998) *J Cell Biol* 143, 1471-84.
- (3) Galcheva-Gargova, Z. et al. (1998) *Mol Biol Cell* 9, 2963-71.
- (4) Doran, B. et al. (2006) *Proc Natl Acad Sci USA* 103, 7471-5.

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 Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.