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#2014 Store at -20C

ZPR1 (LG1) Mouse mAb

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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R Mk	Endogenous	51	Mouse IgG1	#O75312	8882

Product Usage Information

Application

Western Blotting

Dilution

1:1000

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

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.

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).

Background References

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

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

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey

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