

**LIS1 Antibody**

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**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	47	Rabbit	#P43034	5048

**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 and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

**Specificity/Sensitivity**

LIS1 Antibody recognizes endogenous levels of total LIS1 protein.

**Source / Purification**

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly298 of human LIS1 protein. Antibodies are purified by protein A and peptide affinity chromatography.

**Background**

LIS1 is a cytoskeleton-interacting protein that contains an N-terminal dimerization domain and a C-terminal β-propeller domain that interacts with the motor domain of dynein (1-3). Research studies have shown that mutations in the LIS1 gene are involved in lissencephaly, a disease characterized by severe defects in brain development (4). LIS1 also plays a critical role in cortical migration and development in the brain (5). LIS1 activity is required for retrograde translocation of excitatory synapses in developing interneuron dendrites in a microtubule-dependent fashion (6).

**Background References**

1. Sasaki, S. et al. (2000) *Neuron* 28, 681-96.
2. Tai, C.Y. et al. (2002) *J Cell Biol* 156, 959-68.
3. Tarricone, C. et al. (2004) *Neuron* 44, 809-21.
4. Reiner, O. et al. (1993) *Nature* 364, 717-21.
5. Wynshaw-Boris, A. (2007) *Clin Genet* 72, 296-304.
6. Kawabata, I. et al. (2012) *Nat Commun* 3, 722.

**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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