

## Rabbit Anti-Osterix antibody

SL1110R

<b>Product Name:</b>	Osterix
<b>Chinese Name:</b>	成骨相关转录因子抗体
<b>Alias:</b>	Osterix; MGC126598; Osx; Sp 7; Sp7; Sp7 transcription factor; Transcription factor Sp7; Zinc finger protein osterix; SP7_HUMAN.
<b>文献引用</b> <b>PubMed</b> :	<p><b>Specific References(13)</b> SL1110R has been referenced in 13 publications.</p> <p><b>[IF=6.13]</b>Chen, Jin-Ran, et al. "Diet derived phenolic acids regulate osteoblast and adipocyte lineage commitment and differentiation in young mice." Journal of Bone and Mineral Research (2013).<b>WB;Mouse.</b>  <a href="#">PubMed:23832484</a></p> <p><b>[IF=3.68]</b>Dong, Weijie, et al. "Phenotypic characterization of craniofacial bone marrow stromal cells: unique properties of enhanced osteogenesis, cell recruitment, autophagy, and apoptosis resistance." Cell and Tissue Research (2014): 1-11.<b>WB;Rat.</b>  <a href="#">PubMed:24927919</a></p> <p><b>[IF=2.86]</b>Kishi, Yuta, et al. "PARP Inhibitor PJ34 Suppresses Osteogenic Differentiation in Mouse Mesenchymal Stem Cells by Modulating BMP-2 Signaling Pathway."International Journal of Molecular Sciences 16.10 (2015): 24820-24838.<b>WB;Mouse.</b>  <a href="#">PubMed:26492236</a></p> <p><b>[IF=6.52]</b>Agarwal, Shailesh, et al. "Analysis of bone-cartilage-stromal progenitor populations in trauma induced and genetic models of heterotopic ossification." STEM CELLS (2016).<b>IHC-P;Mouse.</b>  <a href="#">PubMed:27068890</a></p>

**[IF=3.42]**Tang, Zhurong, et al. "Comparison of ectopic bone formation process induced by four calcium phosphate ceramics in mice." Materials Science and Engineering: C (2016).**IHC-P;Mouse.**

[PubMed:27772699](#)

**[IF=0.00]**Schlie-Wolter, S., et al. Osteogenic Differentiation of Human Adipose-Derived Stem Cells (hASC): Role of FAK and Ras-MAPK Signaling. (2016) J Stem Cell Regen Bio 2(2): 1- 19**WB;Human.**

[PubMed:0](#)

**[IF=5.23]**Agarwal, Shailesh, et al. "Local and Circulating Endothelial Cells Undergo Endothelial to Mesenchymal Transition (EndMT) in Response to Musculoskeletal Injury." Scientific Reports 6 (2016): 32514.**WB;Mouse.**

[PubMed:27616463](#)

**[IF=5.30]**Rajshankar, Dhaarmini, Yongqiang Wang, and Christopher A. McCulloch. "Osteogenesis requires FAK-dependent collagen synthesis by fibroblasts and osteoblasts." The FASEB Journal (2016): fj-201600645R.**WB;Mouse.**

[PubMed:27881487](#)

**[IF=1.56]**Wang, Yilin, et al. "Synergistic effects of overexpression of BMP $\beta$ 2 and TGF $\beta$ 3 on osteogenic differentiation of bone marrow mesenchymal stem cells." Molecular Medicine Reports (2016): 11.**WB;Rabbit.**

[PubMed:27878265](#)

**[IF=2.20]**Ranganathan, Kavitha, et al. "The role of the adaptive immune system in burn-induced heterotopic ossification and mesenchymal cell osteogenic differentiation." Journal of Surgical Research 206.1 (2016): 53-61.**IF(IHC-P);Mouse.**

[PubMed:27916375](#)

**[IF=5.23]**Li, Shao, et al. "A Conditional Knockout Mouse Model Reveals a Critical Role of PKD1 in Osteoblast Differentiation and Bone Development." Scientific Reports 7 (2017): 40505.**WB;Mouse.**

[PubMed:28084409](#)

**[IF=2.33]**Qian, Dong-Yang, et al. "Differential circRNA expression profiles during the BMP2-induced osteogenic differentiation of MC3T3-E1 cells." Biomedicine & Pharmacotherapy 90 (2017): 492-499.**WB;Mouse.**

[PubMed:28395271](#)

	<p><b>[IF=0.57]</b>Shi, Hua-Li, et al. "Effect of polygonimitin C on bone formation and resorption in human osteoblast-like MG63 cells." Tropical Journal of Pharmaceutical Research 16.7 (2017): 1595-1600.<b>WB;Human.</b></p> <p style="text-align: right;"><a href="#">PubMed:0</a></p>
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	45kDa
<b>Cellular localization:</b>	The nucleus
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human Osterix:331-431/431
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	<p>This gene encodes a member of the Sp subfamily of Sp/XKLF transcription factors. Sp family proteins are sequence-specific DNA-binding proteins characterized by an amino-terminal trans-activation domain and three carboxy-terminal zinc finger motifs. This protein is a bone specific transcription factor and is required for osteoblast differentiation and bone formation.[provided by RefSeq, Jul 2010]</p> <p><b>Function:</b> Transcriptional activator essential for osteoblast differentiation. Binds to SP1 and EKLF consensus sequences and to other G/C-rich sequences (By similarity).</p> <p><b>Subunit:</b> Interacts with NO66; the interaction is direct and inhibits transcription activator activity.</p> <p><b>Subcellular Location:</b> Nucleus.</p> <p><b>Tissue Specificity:</b> Osteoblast/chondrocyte specific.</p> <p><b>DISEASE:</b></p>

Osteogenesis imperfecta 12 (OI12) [MIM:613849]: A form of osteogenesis imperfecta, a connective tissue disorder characterized by low bone mass, bone fragility and susceptibility to fractures after minimal trauma. Disease severity ranges from very mild forms without fractures to intrauterine fractures and perinatal lethality. Extraskelatal manifestations, which affect a variable number of patients, are dentinogenesis imperfecta, hearing loss, and blue sclerae. OI12 is an autosomal recessive form characterized by recurrent fractures, mild bone deformations, generalized osteoporosis, delayed teeth eruption, no dentinogenesis imperfecta, normal hearing, and white sclerae. Note=The disease is caused by mutations affecting the gene represented in this entry.

**Similarity:**

Belongs to the Sp1 C2H2-type zinc-finger protein family.  
Contains 3 C2H2-type zinc fingers.

**SWISS:**

Q8TDD2

**Gene ID:**

121340

**Database links:**

[Entrez Gene: 121340](#)Human

[Entrez Gene: 170574](#)Mouse

[Entrez Gene: 300260](#)Rat

[Omim: 606633](#)Human

[SwissProt: Q8TDD2](#)Human

[SwissProt: Q5RM08](#)Mouse

[SwissProt: Q8VI67](#)Mouse

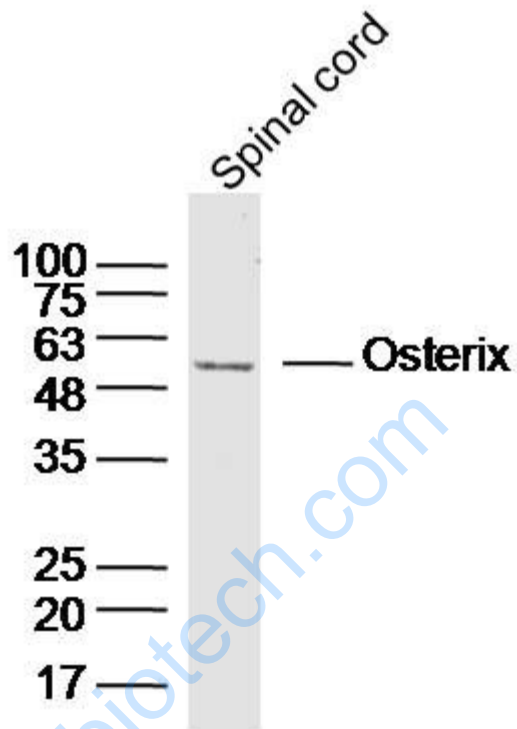
[SwissProt: Q6IMK1](#)Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Osterix成骨相关转录因子是一种具有锌指基序结构域的转录因子, 在体内的表达对成骨细胞具有特异性。该蛋白只在发育的骨组织中特异性表达, 是成骨Cell differentiation和骨形成过程中所必需的转录因子。骨髓基质Stem cells分化为表达典型的成骨性标志基因的成骨细胞需要OSX的调控。

Picture:



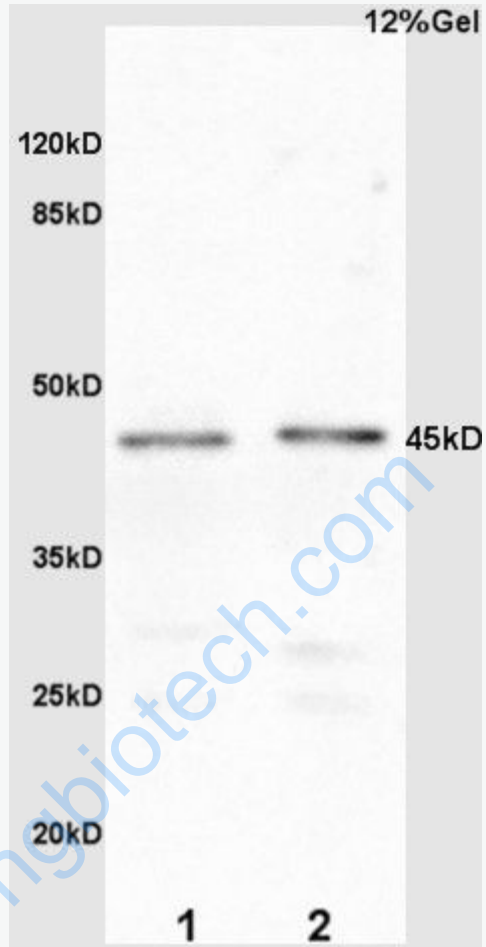
Sample: Spinal cord (Mouse) Lysate at 40 ug

Primary: Anti-Osterix(SL1110R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 45kD

Observed band size: 50kD



Sample:

Embryo(Mouse) lysate at 30ug;

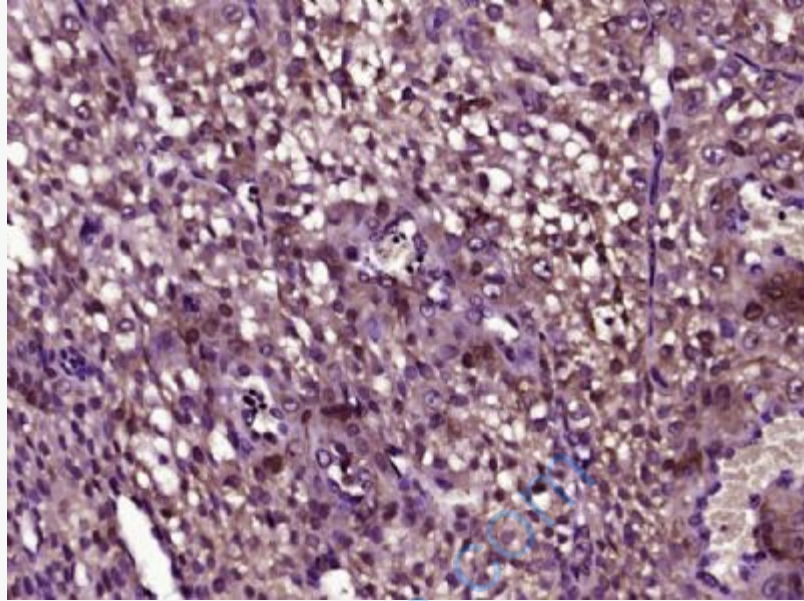
Embryo(Mouse) lysate at 30ug;

Primary: Anti-Osterix (SL1110R) at 1:200 dilution;

Secondary: HRP conjugated Goat Anti-Rabbit IgG(SL1110R) at 1: 3000 dilution;

Predicted band size : 45kD

Observed band size : 45kD



Paraformaldehyde-fixed, paraffin embedded (Mouse embryos); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Osterix) Polyclonal Antibody, Unconjugated (SL1110R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.