

888-466-3604 | support@bosterbio.com | www.bosterbio.com

### **Anti-Sp7/Osterix Antibody Picoband®**

Catalog Number: A02077-1

### About SP7

Transcription factor Sp7, also called Osterix (Osx), is a protein that in humans is encoded by the SP7 gene. 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.

#### **Overview**

Product Name	Anti-Sp7/Osterix Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Sp7/Osterix Antibody Picoband® catalog # A02077-1. Tested in ELISA, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q8TDD2

#### **Technical Details**

Immunogen	E.coli-derived human Sp7/Osterix recombinant protein (Position: A2-E241).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.



# BOSTER BIOLOGICAL TECHNOLOGY 3942 B Valley Ave, Pleasanton, CA 94566

888-466-3604 | support@bosterbio.com | www.bosterbio.com

Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5ug/ml, Human, Mouse, Rat ELISA, 0.1-0.5ug/ml, -



888-466-3604 | support@bosterbio.com | www.bosterbio.com

### Anti-Sp7/Osterix Antibody Picoband® (A02077-1) Images

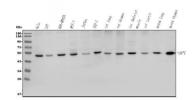


Figure 1. Western blot analysis of Sp7/Osterix using anti-Sp7/Osterix antibody (A02077-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human HELA whole cell lysates, Lane 2: human U87 whole cell lysates. Lane 3: human MDA-MB453 whole cell lysates, Lane 4: human MCF-7 whole cell lysates, Lane 5: human Jurkat whole cell lysates, Lane 6: human THP-1 whole cell lysates. Lane 7: rat lung tissue lysates, Lane 8: rat thymus tissue lysates. Lane 9: rat skeletal muscle tissue lysates, Lane 10: rat testis tissue lysates, Lane 11: mouse lung tissue lysates, Lane 12: mouse thymus tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Sp7/Osterix antigen affinity purified polyclonal antibody (Catalog # A02077-1) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Sp7/Osterix at approximately 45KD. The expected band size for Sp7/Osterix is at 45KD.

#### **2** Publications Citing This Product

1. PubMed ID: 10.1111/j.1757-7861.2010.00100.x, Dynamic expression of Runx2, Osterix and AJ18 in the femoral head of steroid Dinduced osteonecrosis in rats

2. PubMed ID: 32018039, Chen G,Wang Q,Li Z,Yang Q,Liu Y,Du Z,Zhang G,Song Y.Circular RNA CDR1as promotes adipogenic and suppresses osteogenic differentiation of BMSCs in steroid-induced osteonecrosis of the femoral head.Bone.2020 Apr;133:115258.doi:10.1016/j.bone.2020.115258.Epu

Visit bosterbio.com/anti-sp7-osterix-picoband-trade-antibody-a02077-1-boster.html to see all 2 publications.

#### Submit a product review to Biocompare.com



Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



# BOSTER BIOLOGICAL TECHNOLOGY 3942 B Valley Ave, Pleasanton, CA 94566

888-466-3604 | support@bosterbio.com | www.bosterbio.com

#### Anti-Sp7/Osterix Antibody