

Anti-SOX2 Antibody Picoband™

Catalog Number: A00105-1

About SOX2

SR(Y)(sex determining region Y)-box 2, also known as SOX2, is a transcription factor that is essential for maintaining self-renewal, or pluripotency of undifferentiated embryonic stem cells. Sox2 is a member of the Sox family of transcription factors, which have been shown to play key roles in many stages of mammalian development. This gene is mapped to 3q26.33. It is found that SOX2 can regulate OCT3/4 expression and maintains ES pluripotency through upstream transcription factors. SOX2 is identified as a lineage-survival oncogene in lung and esophageal squamous cell carcinoma. In addition to those, SOX2 has a critical role in maintenance of embryonic and neural stem cells and holds great promise in research involving induced pluripotency, an emerging and very promising field of regenerative medicine.

Overview

Product Name	Anti-SOX2 Antibody Picoband™
Reactive Species	Human, Rat
Description	Boster Bio Anti-SOX2 Antibody Picoband™ catalog # A00105-1. Tested in ELISA, WB applications. This antibody reacts with Human, Rat.
Application	ELISA, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	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 freezing and thawing.
Host	Rabbit
Uniprot ID	P48431

Technical Details

Immunogen	E.coli-derived human SOX2 recombinant protein (Position: G185-N208).
Predicted Reactive Species	Chicken
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 µg/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.25-0.5 µg/ml, Human, Rat Direct ELISA, 0.1-0.5 µg/ml, Human

Anti-SOX2 Antibody Picoband™ (A00105-1) Images

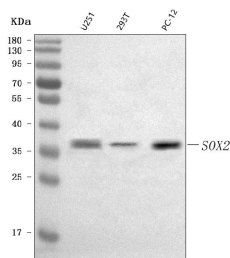


Figure 1. Western blot analysis of SOX2 using anti-SOX2 antibody (A00105-1).

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 30 ug of sample under reducing conditions.

Lane 1: human U251 whole cell lysates,

Lane 2: human 293T whole cell lysates,

Lane 3: rat PC-12 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 ma 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-SOX2 antigen affinity purified poly clonal antibody (Catalog # A00105-1) 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 ING-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Luminescence detection (ECL) kit (Catalog # EK1002) with Anon 5200 system. A specific band was detected for SOX2 at approximately 36 kDa. The expected band size for SOX2 is at 34 kDa.

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