

Anti-Mn SOD Sod2 Antibody

Catalog Number: A00349

About Sod2

Anti-Glycogen Synthase 1 pS641 antibody is validated by IHC, Western Blot and ELISA. Human muscle glycogen synthase (GS) is responsible for the biosynthesis of glycogen from phosphorylated glucose units. Mammalian liver and muscle contain GS consisting of four subunits with a total molecular weight of 360,000. GS is subject to regulation through both allosteric and covalent modification and occurs in two forms: the phosphorylated inactive form, and the dephosphorylated active form. GS is inactivated by the serine/threonine kinase called glycogen synthase kinase-3 β that mainly functions to phosphorylate muscle glycogen synthase. This antibody is specific for the phosphorylated form of GS at S641. Phosphorylation of GS at S641 has been associated with Antiphospholipid Antibody Syndrome.

Overview

Product Name	Anti-Mn SOD Sod2 Antibody
Reactive Species	Bovine, Chicken, Dog, Drosophila, Guinea pig, Hamster, Human, Monkey, Mouse, Rabbit, Rat, Sheep, Xenopus, Clam, Porcine
Description	Boster Bio Anti-Mn SOD Sod2 Antibody (Catalog# A00349). Tested in ELISA, Flow Cytometry, IHC-P, IP, WB application(s). This antibody reacts with Human, Mouse, Rat, Bovine, Chicken, Clam, Dog, Drosophila, Guinea pig, Hamster, Monkey, Porcine, Rabbit, Sheep, Xenopus.
Application	ELISA, Flow Cytometry, IP, IHC-P, WB
Clonality	Polyclonal
Formulation	Liquid. In sodium phosphate buffer, pH 7.0, containing 15mg/ml BSA, 0.09% sodium azide, and 50% glycerol.
Storage Instructions	Store at -20°C for long-term storage. Avoid freeze/thaw cycles.
Host	Rabbit
Uniprot ID	P07895

Technical Details

Immunogen	Native rat Mn SOD
Predicted Reactive Species	Bovine, Chicken
Isotype	IgG
Form	Liquid
Concentration	0.5-1mg/ml, actual concentration vary by lot. Use suggested dilution ratio to decide dilution procedure.

Purification	Immunoaffinity 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: Flow Cytometry (1:100) Immunoprecipitation (1:100) Western Blot (1:1,000, colorimetric). Detects a band of ~25kDa. Suggested dilutions/conditions may not be available for all applications. Optimal conditions must be determined individually for each application.

Anti-Mn SOD Sod2 Antibody (A00349) Images

Flow cytometry analysis of U251 cells using Mn SOD, pAb (right) and control rabbit IgG (left).

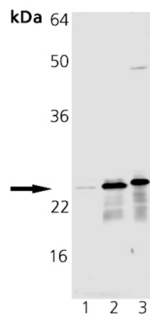
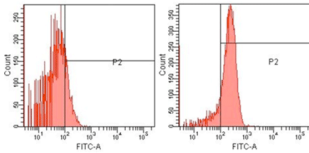


Figure 1. Western blot analysis of Sod2 using anti-Sod2 antibody (A00349). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. After Electrophoresis, proteins 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-Sod2 antigen affinity purified polyclonal antibody (Catalog # A00349) 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 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # SA1022) with Tanon 5200 system. A specific band was detected for Sod2.

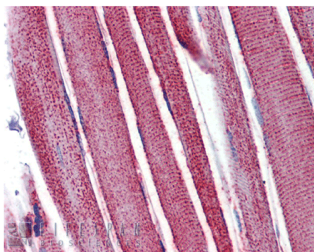


Figure 2. IHC analysis of Sod2 using anti-Sod2 antibody (A00349). Sod2 was detected in paraffin-embedded section. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Sod2 Antibody (A00349) overnight at 4°C. Biotinylated goat anti Rabbit IgG antibody was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

1 Publications Citing This Product

1. PubMed ID: 27443826, Maternal inflammation activated ROS-p38 MAPK predisposes offspring to heart damages caused by isoproterenol via augmenting ROS generation

Visit bosterbio.com/anti-mn-sod-antibody-a00349-boster.html to see all 1 publications.

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