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antibody and ELISA experts

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Anti-APEX2 Antibody Picoband™

Catalog Number: A07203

About APEX2

APEX2, also called apurinic/apyrimidinic endonuclease like-2, is a member of the apurinic/apyrimidinic (AP) family of endonucleases that initiate the repair of AP sites formed by spontaneous hydrolysis of the N-glycosylic bond, mutagen-induced base release, or damaged-base excision by a DNA repair glycosylase. RT-PCR detected APEX2 expression in HeLa cells, Jurkat cells, and human kidney, brain and fetal brain tissue. The APEX2 gene is mapped to chromosome Xp11.21. APEX2 participates in both nuclear and mitochondrial base excision repair (BER) and it can play a role in processing 3-prime-damaged termini or 3-prime-mismatched nucleotides. Additionally, APEX2 displayed weaker AP site-specific and 3-prime nuclease activities compared to APEX1.

Overview

Product Name	Anti-APEX2 Antibody Picoband™
Reactive Species	Human, Monkey, Mouse, Rat
Description	Boster Bio Anti-APEX2 Antibody Picoband™ catalog # A07203. Tested in Flow Cytometry, WB applications. This antibody reacts with Human, Monkey, Mouse, Rat.
Application	Flow Cytometry, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
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	Q9UBZ4

Technical Details

Immunogen	E.coli-derived human APEX2 recombinant protein (Position: L102-A210). Human APEX2 shares 91.7% amino acid (aa) sequence identity with mouse APEX2.
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.

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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, 0.1-0.5ug/ml, Human, Mouse, Monkey, Rat Flow Cytometry, 1-3ug/1x10^6 cells, Human

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Anti-APEX2 Antibody Picoband™ (A07203) Images

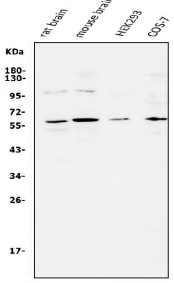

Figure 1. Western blot analysis of APEX2 using anti-APEX2 antibody (A07203). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
lane 1: rat brain tissue lysate,
lane 2: mouse brain tissue lysate,
lane 3: HEK293 whole cell lysate,
lane 4: COS-7 whole cell lysate.
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-APEX2 antigen affinity purified polyclonal antibody (Catalog # A07203) 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 # EK1002) with Tanon 5200 system. A specific band was detected for APEX2 at approximately 57KD. The expected band size for APEX2 is at 57KD.

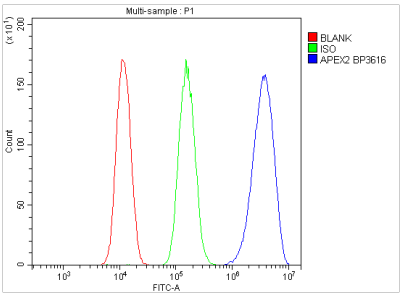

Figure 2. Flow Cytometry analysis of A549 cells using anti-CYP7A1 antibody (A07203).
Overlay histogram showing A549 cells stained with A07203 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CYP7A1 Antibody (A07203, 1ug/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.