

Anti-ALOX12 Antibody Picoband®

Catalog Number: A02275-2

About ALOX12

ALOX12, Arachidonate 12-lipoxygenase, is an enzyme that in humans is encoded by the ALOX12 gene. By fluorescence in situ hybridization, the ALOX12 gene is located in band 17p13.1. The gene consists of 14 exons with 13 introns and spans approximately 15 kb of DNA. Arachidonate 12-lipoxygenase introduces a molecular oxygen into the C-12 position of arachidonic acid to produce 12(S)-hydroperoxy-5,8,10,14-eicosatetraenoic acid. The major pathway of arachidonic acid metabolism in human platelets proceeds via a 12-lipoxygenase enzyme. Expression of the ALOX12 gene was detected in human erythroleukemia cells, platelets, and human umbilical vein endothelial cells by reverse transcription-PCR analysis.

Overview

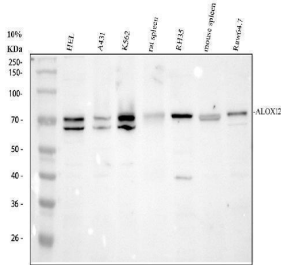
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|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name | Anti-ALOX12 Antibody Picoband® |
| Reactive Species | Human, Mouse, Rat |
| Description | Boster Bio Anti-ALOX12 Antibody Picoband® catalog # A02275-2. Tested in ELISA, ICC/IF, 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, IF, ICC, 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 | P18054 |

Technical Details

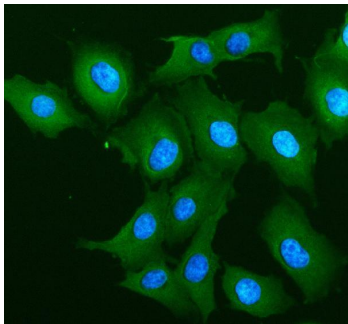
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| Immunogen | E.coli-derived human ALOX12 recombinant protein (Position: A186-R628). Human ALOX12 shares 87.3% and 86% amino acid (aa) sequence identity with mouse and rat ALOX12, respectively. |
| Recommended Detection Systems | Boster recommends ECL Plus Western Blotting Substrate (Catalog # AR1196-200) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for ICC. |
| Cross Reactivity | No cross reactivity with other proteins. |
| Isotype | IgG |

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|---------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Form | Lyophilized |
| Concentration | Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml. |
| Purification | Immunogen affinity purified. |
| Suggested Dilutions | Western blot, 0.25-0.5 ug/ml, Human, Mouse, Rat Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human ELISA, 0.1-0.5 ug/ml, - |

Anti-ALOX12 Antibody Picoband® (A02275-2) Images



Western blot analysis of ALOX12 using anti-ALOX12 antibody (A02275-2). Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates, Lane 2: human A431 whole cell lysates, Lane 3: human K562 whole cell lysates, Lane 4: rat spleen tissue lysates, Lane 5: rat RH35 whole cell lysates, Lane 6: mouse spleen tissue lysates, Lane 7: mouse RAW264.7 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-ALOX12 antigen affinity purified polyclonal antibody (A02275-2) 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 (Catalog # BA1054) at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for ALOX12 at approximately 76 kDa. The expected band size for ALOX12 is at 76 kDa.



IF analysis of ALOX12 using anti-ALOX12 antibody (A02275-2). ALOX12 was detected in an immunocytochemical section of A549 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-ALOX12 Antibody (A02275-2) overnight at 4°C. Fluoro488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

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Anti-ALOX12 Antibody

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