BOSTER
antibody and ELISA experts

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# Anti-DOCK180/DOCK1 Antibody Picoband™

**Catalog Number:** A03440-2

## About DOCK1

Dock180, (Dedicator of cytokinesis) also known as DOCK1, is a large (~180 kDa) protein involved in intracellular signalling networks. This gene encodes a member of the dedicator of cytokinesis protein family. Dedicator of cytokinesis proteins act as guanine nucleotide exchange factors for small Rho family G proteins. The encoded protein regulates the small GTPase Rac, thereby influencing several biological processes, including phagocytosis and cell migration. Overexpression of this gene has also been associated with certain cancers. Alternative splicing results in multiple transcript variants.

## Overview

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| Product Name | Anti-DOCK180/DOCK1 Antibody Picoband™ |
| Reactive Species | Human |
| Description | Boster Bio Anti-DOCK180/DOCK1 Antibody Picoband™ catalog # A03440-2. Tested in ELISA, Flow Cytometry, IF, IHC, WB applications. This antibody reacts with Human. |
| Application | ELISA, Flow Cytometry, IF, IHC, WB |
| Clonality | Polyclonal |
| Formulation | Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4. |
| 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 | Q14185 |

## Technical Details

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| Immunogen | E.coli-derived human DOCK180/DOCK1 recombinant protein (Position: S100-T1732). |
| Recommended Detection Systems | Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P). |
| 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. |

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| | If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.<br>Some PubMed article(s) citing the expression level of this target are as follows:<br>Boster Bio's internal QC testing used Western blot, 0.25-0.5 μg/ml, Human<br>Immunohistochemistry(Paraffin-embedded Section), 2-5 μg/ml, Human<br>Immunofluorescence, 5 □g/ml, Humann<br>Flow Cytometry, 1-3 μg/1x$10^6$ cells, Human<br>Direct ELISA, 0.1-0.5 μg/ml, Human<br><br>For protocols, please visit https://www.bosterbio.com/protocol-and-troubleshooting/ |

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# Anti-DOCK180/DOCK1 Antibody Picoband™ (A03440-2) Images

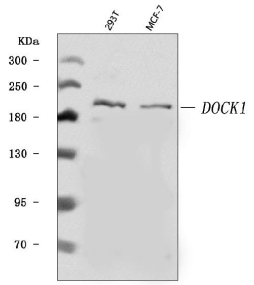


Figure 1. Western blot analysis of DOCK180/DOCK1 using anti-DOCK180/DOCK1 antibody (A03440-2).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human 293T whole cell lysates,
Lane 2: human MCF-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-DOCK180/DOCK1 antigen affinity purified polyclonal antibody (Catalog # A03440-2) 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 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 DOCK180/DOCK1 at approximately 215 kDa. The expected band size for DOCK180/DOCK1 is at 215 kDa.

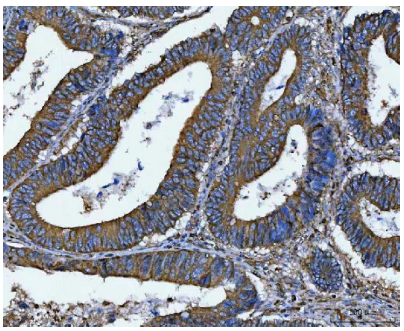

Figure 2. IHC analysis of DOCK180/DOCK1 using anti-DOCK180/DOCK1 antibody (A03440-2).
DOCK180/DOCK1 was detected in a paraffin-embedded section of human colorectal adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-DOCK180/DOCK1 Antibody (A03440-2) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

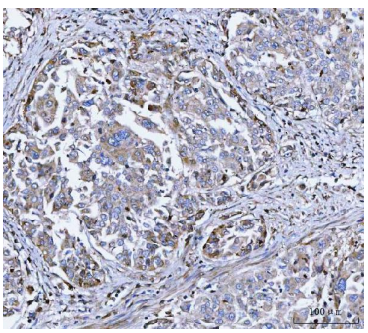

Figure 3. IHC analysis of DOCK180/DOCK1 using anti-DOCK180/DOCK1 antibody (A03440-2).
DOCK180/DOCK1 was detected in a paraffin-embedded section of human lung adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-DOCK180/DOCK1 Antibody (A03440-2) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

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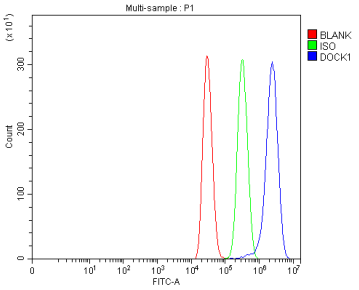


Figure 4. Flow Cytometry analysis of MCF-7 cells using anti-DOCK180/DOCK1 antibody (A03440-2).
Overlay histogram showing MCF-7 cells stained with A03440-2 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-DOCK180/DOCK1 Antibody (A03440-2, 1 ug/1x$10^6$ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x$10^6$ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x$10^6$) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

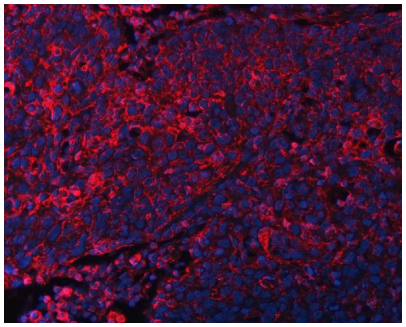

Figure 5. IF analysis of DOCK180/DOCK1 using anti-DOCK180/DOCK1 antibody (A03440-2).
DOCK180/DOCK1 was detected in a paraffin-embedded section of human esophageal squamous cell carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5 ug/mL rabbit anti-DOCK180/DOCK1 Antibody (A03440-2) overnight at 4°C. DyLight®550 Conjugated Goat Anti-Rabbit IgG (BA1135) 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.

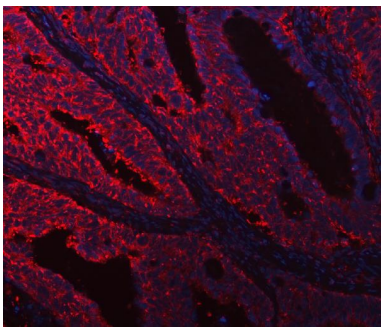

Figure 6. IF analysis of DOCK180/DOCK1 using anti-DOCK180/DOCK1 antibody (A03440-2).
DOCK180/DOCK1 was detected in a paraffin-embedded section of human intestinal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5 ug/mL rabbit anti-DOCK180/DOCK1 Antibody (A03440-2) overnight at 4°C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) 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.