

Anti-Pdcd4 phospho S457 Monoclonal Antibody

Catalog Number: MP01105

About PDCD4

Programmed cell death 4 (Pdcd4) is a novel tumor suppressor. Pdcd4 directly inhibits the helicase activity of eukaryotic translation initiation factor 4A (eIF4A), a component of the translation initiation complex. Pdcd4 also suppresses the transactivation of activator protein-1 (AP-1)-responsive promoters by c-Jun. Pdcd4 contains two Akt phosphorylation sites, one at Ser67 and the other at Ser457. The phosphorylation of Pdcd4 by Akt causes nuclear translocation of Pdcd4 and a significant decrease in the ability of Pdcd4 to interfere with the transactivation of AP-1-responsive promoters by c-Jun.

Overview

Product Name	Anti-Pdcd4 phospho S457 Monoclonal Antibody
Reactive Species	Human, Mouse
Description	Boster Bio Anti-Pdcd4 phospho S457 Monoclonal Antibody (Catalog # MP01105). Tested in ELISA, IHC, WB applications. This antibody reacts with Human, Mouse.
Application	ELISA, IHC, WB
Clonality	Monoclonal Clone: 9G6
Formulation	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2, 0.01% (w/v) Sodium Azide
Storage Instructions	Store vial at -20°C prior to opening. Aliquot contents and freeze at -20°C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4°C as an undiluted liquid. Dilute only prior to immediate use. Expiration date is one (1) year from date of opening. (Ship on dry ice.)
Host	Mouse
Uniprot ID	Q53EL6

Technical Details

Immunogen	This monoclonal antibody was produced by repeated immunizations with a synthetic peptide corresponding to residues surrounding Ser457 of the human Pdcd4 protein.
Predicted Reactive Species	Hepatitis Virus
Cross Reactivity	No cross reactivity with other proteins.
Isotype	IgG1 kappa
Form	Liquid (sterile filtered)
Concentration	1.0 mg/mL by UV absorbance at 280 nm

Purification	Pdcd4 phospho S457 Antibody was purified from concentrated tissue culture supernate by Protein A chromatography. This antibody is specific for human Pdcd4 protein phosphorylated at Ser457. A BLAST analysis was used to suggest cross-reactivity with Pdcd4 from human, mouse, rat and Xenopus based on 100% homology with the immunizing sequence. Cross-reactivity with Pdcd4 from other sources has not been determined.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>ELISA: 1:20,000 - 1:100,000</p> <p>IHC: 1:1,000 - 1:5,000</p> <p>WB: 1:2,000 - 1:10,000</p>

Anti-Pdcd4 phospho S457 Monoclonal Antibody (MP01105) Images

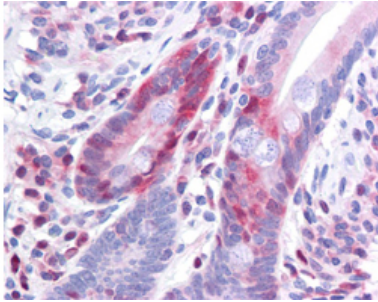


Figure 1. IHC analysis of PDCD4 using anti-PDCD4 antibody (MP01105). PDCD4 was detected in paraffin-embedded section. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PDCD4 Antibody (MP01105) overnight at 4°C. Biotinylated goat anti-Mouse 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 # SA1021) with DAB as the chromogen.

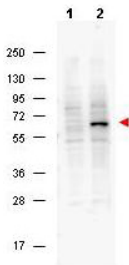


Figure 2. Western blot analysis of PDCD4 using anti-PDCD4 antibody (MP01105). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. After Electrophoresis, 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-PDCD4 antigen affinity purified polyclonal antibody (Catalog # MP01105) 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-Mouse 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 # SA1021) with Tanon 5200 system. A specific band was detected for PDCD4.

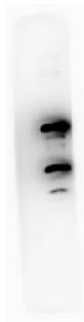


Figure 3. Western blot analysis of PDCD4 using anti-PDCD4 antibody (MP01105). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. After Electrophoresis, 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-PDCD4 antigen affinity purified polyclonal antibody (Catalog # MP01105) 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-Mouse 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 # SA1021) with Tanon 5200 system. A specific band was detected for PDCD4.

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