

# Pdcd-7 (D-14): sc-104584

## BACKGROUND

PD-1 (programmed cell death-1 protein) is a type I transmembrane receptor and a member of the immunoglobulin gene superfamily. Expression of PD-1 is detected in mouse thymus, and it is induced in stimulated B and T cell lines, where it may play a role in the negative regulation of various immune responses. PD-2 (also known as PDCD2, PDL2 or B7DC) is highly expressed in placenta, heart, pancreas, lung and liver. PD-2 is also expressed in spleen, lymph nodes and thymus. Pdcd-4 is a nuclear protein localized to the nucleus of proliferating cells. ALG-2 (apoptosis-linked gene 2), also designated programmed cell death protein 6, is a Ca<sup>2+</sup>-binding protein that participates in regulatory events occurring late in the apoptotic program and where several death signals converge. Pdcd-7, also designated programmed cell death protein 7, is a 485 amino acid protein that promotes apoptosis when over-expressed. Human Pdcd-7 and the mouse Pdcd-7 protein, designated as Es18, share 95% homology in the overlapping region.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: PDCD7 (human) mapping to 15q22.31; Pdcd7 (mouse) mapping to 9 C.

## SOURCE

Pdcd-7 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Pdcd-7 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-104584 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Pdcd-7 (D-14) is recommended for detection of Pdcd-7 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Pdcd-7 (D-14) is also recommended for detection of Pdcd-7 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for Pdcd-7 siRNA (h): sc-90046, Pdcd-7 siRNA (m): sc-72132, Pdcd-7 shRNA Plasmid (h): sc-90046-SH, Pdcd-7 shRNA Plasmid (m): sc-72132-SH, Pdcd-7 shRNA (h) Lentiviral Particles: sc-90046-V and Pdcd-7 shRNA (m) Lentiviral Particles: sc-72132-V.

Molecular Weight of Pdcd-7: 55 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.