

# Pdcd2L (K-13): sc-101251

## BACKGROUND

Pdcd-1 (programmed cell death-1 protein) is a type I transmembrane receptor and a member of the immunoglobulin gene superfamily. Expression of Pdcd-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. Pdcd-2 (programmed cell death-2), also known as PD-2, PDL2 or B7DC, is highly expressed in placenta, heart, pancreas, lung and liver, and lowly expressed in spleen, lymph nodes and thymus. Pdcd2L (programmed cell death 2-like), also known as MGC13096, is a 358 amino acid protein that is similar to Pdcd-2 and may play a role in apoptosis.

## REFERENCES

1. Ishida, Y., et al. 1992. Induced expression of PD-1, a novel member of the immunoglobulin gene superfamily, upon programmed cell death. *EMBO J.* 11: 3887-3895.
2. Agata, Y., et al. 1996. Expression of the PD-1 antigen on the surface of stimulated mouse T and B lymphocytes. *Int. Immunol.* 8: 765-772.
3. Park, E.J., et al. 1999. Characterization of a novel mouse cDNA, ES18, involved in apoptotic cell death of T cells. *Nucleic Acids Res.* 27: 1524-1530.
4. Li, W., et al. 2000. Increased expression of apoptosis-linked gene 2 (ALG2) in the rat brain after temporary focal cerebral ischemia. *Neuroscience* 96: 161-168.
5. Latchman, Y., et al. 2001. PD-L2 is a second ligand for PD-1 and inhibits T cell activation. *Nat. Immunol.* 2: 261-268.
6. Koshikawa, T., et al. 2005. Alterations of DNA copy number and expression in genes involved in cell cycle regulation and apoptosis signal pathways in gamma radiation-sensitive SX9 cells and -resistant SR-1 cells. *Radiat. Res.* 163: 374-383.
7. Chen, Q., et al. 2005. Cloning of cDNAs with PDCD2<sub>C</sub> domain and their expressions during apoptosis of HEK293T cells. *Mol. Cell. Biochem.* 280: 185-191.
8. Liu, Z. and Aune, T.M. 2006. Deregulated stress system in non-obese diabetic lymphocyte. *Genes Immun.* 7: 352-358.

## CHROMOSOMAL LOCATION

Genetic locus: PDCD2L (human) mapping to 19q13.11; Pdcd2L (mouse) mapping to 7 B1.

## SOURCE

Pdcd2L (K-13) is a mouse monoclonal antibody raised against recombinant Pdcd2L of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## RESEARCH USE

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

## APPLICATIONS

Pdcd2L (K-13) is recommended for detection of Pdcd2L of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

Suitable for use as control antibody for Pdcd2L siRNA (h): sc-97629, Pdcd2L siRNA (m): sc-152125, Pdcd2L shRNA Plasmid (h): sc-97629-SH, Pdcd2L shRNA Plasmid (m): sc-152125-SH, Pdcd2L shRNA (h) Lentiviral Particles: sc-97629-V and Pdcd2L shRNA (m) Lentiviral Particles: sc-152125-V.

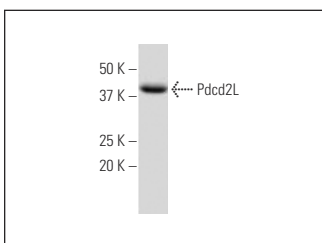
Molecular Weight of Pdcd2L: 39 kDa.

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

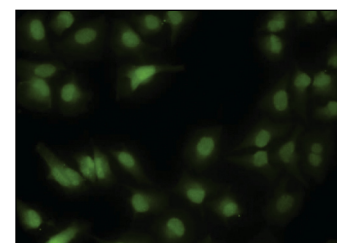
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



Pdcd2L (K-13): sc-101251. Western blot analysis of Pdcd2L expression in HeLa whole cell lysate.



PDCD2L (K-13): sc-101251. Immunofluorescence staining of paraformaldehyde-fixed HeLa cells showing nuclear localization.

## SELECT PRODUCT CITATIONS

1. Houston, B.J., et al. 2020. Programmed cell death 2-like (Pdcd2L) is required for mouse embryonic development. *G3* 10: 4449-4457.

## STORAGE

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

## PROTOCOLS

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