**BACKGROUND**

Engagement of CD28 by B7-1 (CD80) or B7-2 (CD86) in the presence of antigen promotes T cell proliferation, cytokine production, differentiation of effector T cells and the induction of Bcl-x, a promoter of T cell survival. Conversely, engagement of CTLA4 by B7-1 or B7-2 may inhibit proliferation and IL-2 production. Pdcd-1L1 (programmed cell death ligand-1), also known as B7-H1 or PD-L1, is 290 amino acid type I transmembrane protein which is 20% and 15% identical to B7-1 and B7-2, respectively. Pdcd-1L2 has immunoglobulin V-like and C-like domains and a 30 amino acid cytoplasmic tail. It does not bind CD28, cytotoxic T lymphocyte A4 or ICOS (inducible co-stimulator). IL-2, although produced in small amounts, is required for the effect of Pdcd-1L1 co-stimulation. The gene which encodes Pdcd-1L1 maps to human chromosome 9p24. Pdcd-1L2 (programmed cell death ligand-2) is a 73 amino acid protein which contains a signal sequence, IgV- and IgC-like domains, a transmembrane region and a cytoplasmic region. The gene which encodes Pdcd-1L2 maps to human chromosome 9p24.2. The constitutive expression of Pdcd-1L1 and Pdcd-1L2 on parenchymal cells of heart, lung and kidney suggests that the Pdcd-1-Pdcd-L system could provide unique negative signaling to help prevent autoimmune disease.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: PDCD1LG2 (human) mapping to 9p24.2.

**SOURCE**

Pdcd-1L2 (XX19) is a mouse monoclonal antibody raised against the extra-cellular domain of Pdcd-1L2 of human origin.

**PRODUCT**

Each vial contains 100 µg IgG2b in 1.0 ml of PBS with < 0.1% sodium azide and protein stabilizer.

**STORAGE**

For immediate and continuous use, store at 4°C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

**APPLICATIONS**

Pdcd-1L2 (XX19) is recommended for detection of Pdcd-1L2 of 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Pdcd-1L2 siRNA (h): sc-39701, Pdcd-1L2 shRNA Plasmid (h): sc-39701-SH and Pdcd-1L2 shRNA (h) Lentiviral Particles: sc-39701-V.

Molecular Weight of Pdcd-1L2: 32 kDa.

**RESEARCH USE**

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

**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.