

Polyoma virus large T antigen (PyLT): sc-53479

BACKGROUND

The Polyoma virus (Py) is a small oncogenic DNA virus that belongs to the family *Polymaviridae* and produces multiple tumors in the infected host. Py encodes three early proteins: large, middle and small T (tumor) antigen. Polyoma virus Large T antigen (PyLT) is a nuclear phosphoprotein that helps to regulate viral replication and gene expression, allows isolation of viral T antigens, and can induce cellular DNA replication in the absence of other virus-transforming genes. Polyoma virus middle T antigen (PyMT) contains 421 amino acids and is divided into at least three domains, some of which are shared with PyLT and Polyoma virus small T antigen (PyST). PyMT is a major transforming protein responsible for inducing the phenotype of transformed cells and, without it, transformation does not occur. PyST functions in transformation and in productive infection.

REFERENCES

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SOURCE

Polyoma virus large T antigen (PyLT) is a rat monoclonal antibody raised against Polyoma virus-transformed Wistar rat fibroblast cell line REWA5/T1A1.

STORAGE

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

PRODUCT

Each vial contains 200 µg IgG_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Polyoma virus large T antigen (PyLT) is available conjugated to agarose (sc-53479 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53479 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53479 PE), fluorescein (sc-53479 FITC), Alexa Fluor® 488 (sc-53479 AF488), Alexa Fluor® 546 (sc-53479 AF546), Alexa Fluor® 594 (sc-53479 AF594) or Alexa Fluor® 647 (sc-53479 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-53479 AF680) or Alexa Fluor® 790 (sc-53479 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Polyoma virus large T antigen (PyLT) is recommended for detection of Polyoma virus, Large T antigen of Polyoma Virus 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of Polyoma virus large T antigen: 98 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.