PSIP1 (h2): 293T Lysate: sc-117262



The Power to Question

BACKGROUND

PSIP1 (PC4 and SFRS1 interacting protein 1), also known as CLL-associated antigen KW-7, PSIP2, LEDGF (lens epithelium-derived growth factor), PAIP, DFS70 (dense fine speckles 70 kDa protein) or transcriptional coactivator p75/p52, is a 530 amino acid nuclear protein that associates with chromatin throughout the cell cycle. Functioning as a transcriptional coactivator that complexes with the human immunodeficiency virus type 1 (HIV-1) integrase, PSIP1 is essential for the nuclear localization and chromosomal association of viral proteins. As the primary integrase-to-chromatin tethering factor for HIV-1, PSIP1 is responsible for the cellular trafficking of lentiviral integrases. During apoptosis, PSIP1 is cleaved at three sites by caspase-3 and caspase-7, contributing to the pathogenesis of atopic disorders.

REFERENCES

- Ge, H., et al. 1998. Isolation of cDNAs encoding novel transcription coactivators p52 and p75 reveals an alternate regulatory mechanism of transcriptional activation. EMBO J. 17: 6723-6729.
- Singh, D.P., et al. 2000. Lens epithelium-derived growth factor (LEDGF/p75) and p52 are derived from a single gene by alternative splicing. Gene 242: 265-273.
- 3. Krackhardt, A.M., et al. 2002. Identification of tumor-associated antigens in chronic lymphocytic leukemia by SEREX. Blood 100: 2123-2131.
- Wu, X., et al. 2002. Caspase cleavage of the nuclear autoantigen LEDGF/p75 abrogates its pro-survival function: implications for autoimmunity in atopic disorders. Cell Death Differ. 9: 915-925.
- Cherepanov, P., et al. 2003. HIV-1 integrase forms stable tetramers and associates with LEDGF/p75 protein in human cells. J. Biol. Chem. 278: 372-381.
- Cherepanov, P., et al. 2004. Identification of an evolutionarily conserved domain in human lens epithelium-derived growth factor/transcriptional co-activator p75 (LEDGF/p75) that binds HIV-1 integrase. J. Biol. Chem. 279: 48883-48892.
- Llano, M., et al. 2004. Lens epithelium-derived growth factor/p75 prevents proteasomal degradation of HIV-1 integrase. J. Biol. Chem. 279: 55570-55577.
- Llano, M., et al. 2004. LEDGF/p75 determines cellular trafficking of diverse lentiviral but not murine oncoretroviral integrase proteins and is a component of functional lentiviral preintegration complexes. J. Virol. 78: 9524-9537.

CHROMOSOMAL LOCATION

Genetic locus: PSIP1 (human) mapping to 9p22.3.

PRODUCT

PSIP1 (h2): 293T Lysate represents a lysate of human PSIP1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

PSIP1 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive PSIP1 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

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