

PASD1 (NB43): sc-130486

BACKGROUND

Melanoma-associated antigens recognized by cytotoxic T lymphocytes (CTL) have been grouped into three categories: melanocyte differentiation antigens, cancer/testis-specific antigens and mutated or aberrantly expressed antigens. Many of these antigens consist of peptides that are presented to T cells by HLA molecules; they represent potential targets for cancer immunotherapy. PASD1 (PAS domain-containing protein 1), also known as CT63 (cancer/testis antigen 63) or OX-TES-1, is a 773 amino acid nuclear protein that contains one PAS (PER-ARNT-SIM) domain and belongs to the cancer/testis-specific antigen family. Expressed in normal testis and in diffuse large B-cell lymphoma-derived cell lines, PASD1 is thought to function as a transcription factor and may be a potential multiple myeloma-associated antigen. Two isoforms of PASD1 exist due to alternative splicing events.

REFERENCES

- Liggins, A.P., et al. 2004. A novel diffuse large B-cell lymphoma-associated cancer testis antigen encoding a PAS domain protein. *Br. J. Cancer* 91: 141-149.
- Liggins, A.P., et al. 2004. Serologic detection of diffuse large B-cell lymphoma-associated antigens. *Int. J. Cancer* 110: 563-569.
- Guinn, B.A., et al. 2005. Humoral detection of leukaemia-associated antigens in presentation acute myeloid leukaemia. *Biochem. Biophys. Res. Commun.* 335: 1293-1304.
- Sahota, S.S., et al. 2006. PASD1 is a potential multiple myeloma-associated antigen. *Blood* 108: 3953-3955.
- Cooper, C.D., et al. 2006. PASD1, a DLBCL-associated cancer testis antigen and candidate for lymphoma immunotherapy. *Leukemia* 20: 2172-2174.
- Chiriva-Internati, M., et al. 2007. Advances in immunotherapy of multiple myeloma: from the discovery of tumor-associated antigens to clinical trials. *Int. Rev. Immunol.* 26: 197-222.
- Kohno, T., et al. 2008. Association of KRAS polymorphisms with risk for lung adenocarcinoma accompanied by atypical adenomatous hyperplasias. *Carcinogenesis* 29: 957-963.

CHROMOSOMAL LOCATION

Genetic locus: PASD1 (human) mapping to Xq28.

SOURCE

PASD1 (NB43) is a mouse monoclonal antibody raised against recombinant PASD1 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

PASD1 (NB43) is recommended for detection of PASD1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for PASD1 siRNA (h): sc-90848, PASD1 shRNA Plasmid (h): sc-90848-SH and PASD1 shRNA (h) Lentiviral Particles: sc-90848-V.

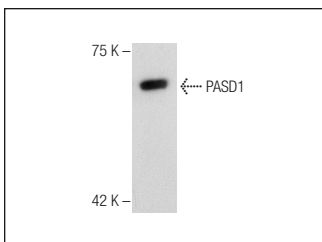
Molecular Weight of PASD1: 87 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or K-562 whole cell lysate: sc-2203.

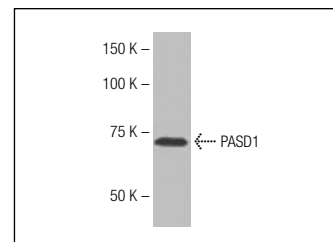
RECOMMENDED SUPPORT REAGENTS

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, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



PASD1 (NB43): sc-130486. Western blot analysis of PASD1 expression in K-562 whole cell lysate.



PASD1 (NB43): sc-130486. Western blot analysis of PASD1 expression in HeLa nuclear extract.

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.