



TSA-1 (P-15): sc-23087

BACKGROUND

The human thymic shared antigen-1 (Ly-6E, RIGE, RIG-E, SCA-2, TSA-1) gene maps to chromosome 8q24 and encodes a 131 amino acid protein that belongs to the Ly-6 family of glycosylphosphatidylinositol (GPI)-linked proteins. Ly-6 family members have an approximate molecular mass of 15 kDa and share amino acid homology throughout a distinctive cysteine rich protein domain that incorporates O-linked carbohydrates. Liver, kidney, ovary, immature thymocytes, stromal cells and peripheral blood leukocytes contain high levels of TSA-1, while much lower levels are present in bone marrow stem cells. Lymphocytes expressing Ly-6 family proteins are responsive to IFNs, particularly IFN- α . The Ly-6 family influences normal seeding and colonization of the thymus by bone marrow stem cells, and the maturation of these cells into mature T lymphocytes.

REFERENCES

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3. Shan, X., et al. 1998. Characterization and mapping to human chromosome 8q24.3 of Ly-6-related gene 9804 encoding an apparent homologue of mouse TSA-1. *J. Immunol.* 160: 197-208.
4. Classon, B.J., et al. 1998. Thymic-shared antigen-1 (TSA-1). A lymphostromal cell membrane Ly-6 superfamily molecule with a putative role in cellular adhesion. *Dev. Immunol.* 6: 149-156.
5. Ding, L., et al. 2001. Inhibition of the function of the Fc γ RIIB by a monoclonal antibody to thymic shared antigen-1, a Ly-6 family antigen. *Immunology* 104: 28-36.
6. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 601384. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
7. LocusLink Report (LocusID: 4061). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: LY6E (human) mapping to 8q24.3.

SOURCE

TSA-1 (P-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TSA-1 of human origin.

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 or our catalog for detailed protocols and support products.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-23087 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TSA-1 (P-15) is recommended for detection of TSA-1 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TSA-1 siRNA (h): sc-106833, TSA-1 shRNA Plasmid (h): sc-106833-SH and TSA-1 shRNA (h) Lentiviral Particles: sc-106833-V.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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