PA28β (h): 293T Lysate: sc-114006



The Power to Question

BACKGROUND

PA28 is an interferon- γ (IFN- γ) inducible proteasome activator required for presentation of certain major histocompatibility (MHC) class I antigens. The PA28 complex is composed of two homologous subunits, α and β , which have similar catalytic properties and associate to form a hexameric ring. PA28 α and PA28 β , form a heteropolymer that binds to both ends of the 20S Proteasome. In the mouse genome, two different chromosomal loci exist for PA28 β , both of which are transcribed and encode a functional PA28 β subunit. PA28 β , for proteasome activator 28 β , is also known as PSME2, REG- β and proteasome (prosome, macropain) activator subunit 2. PA28 β is a strong proteasome activator, although its affinity for the proteasome is about ten-fold less than recombinant PA28 α . The PA28 complex is expressed constitutively in antigenpresenting cells. Downregulation of PA28 results in abnormal proteasome activation and has been implicated in the development of intimal hyperplasia (IH) in animal models.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PSME2 (human) mapping to 14q12.

RESEARCH USE

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

PRODUCT

PA28 β (h): 293T Lysate represents a lysate of human PA28 β transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

PA28 β (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive PA28 β antibodies. Recommended use: 10-20 μl per lane.

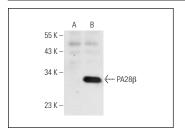
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-tranfected 293T cells.

PA28 β (A8): sc-100799 is recommended as a positive control antibody for Western Blot analysis of enhanced human PA28 β expression in PA28 β transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



PA28β (A8): sc-100799. Western blot analysis of PA28β expression in non-transfected: sc-117752 (A) and human PA28β transfected: sc-114006 (B) 293T whole cell lysates.

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.