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SUG1 (h2): 293 Lysate: sc-172033

BACKGROUND

The 26S Proteasome is a highly ordered proteinase complex consisting of a 20S core and a 19S regulator. While the core is responsible for the proteolytic activity of the proteasome, the regulator contains several ATPase subunits which function in the ATP-dependent degradation of ubiquitinated proteins and confer substrate specificity to the 26S complex. SUG1, also known as PSMC5 (Proteasome 26S subunit ATPase 5), p45 or S8, is an ATPase subunit that is an integral part of the 26S Proteasome complex. Localized to the cytoplasm and nucleus, SUG1 is part of the 19S regulator and functions in the ubiquitin/proteasome-mediated degradation of proteins (specifically receptors) found in the endoplasmic reticulum (ER). Recent studies suggest that assembly of the 26S Proteasome is dependent upon phosphorylation of SUG1 by a protein kinase. *In vitro*, SUG1 also interacts with RXR (retinoid X receptor) and TR (thyroid hormone receptor), suggesting a possible role in transcriptional regulation.

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RESEARCH USE

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

CHROMOSOMAL LOCATION

Genetic locus: PSMC5 (human) mapping to 17q23.3.

PRODUCT

SUG1 (h2): 293 Lysate represents a lysate of human SUG1 transfected 293 cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

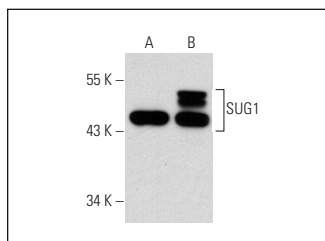
APPLICATIONS

SUG1 (h2): 293 Lysate is suitable as a Western Blotting positive control for human reactive SUG1 antibodies. Recommended use: 10-20 μ l per lane.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

SUG1 (C-20): sc-79116 is recommended as a positive control antibody for Western Blot analysis of enhanced human SUG1 expression in SUG1 transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



SUG1 (2837C4a): sc-81388. Western blot analysis of SUG1 expression in non-transfected: sc-110760 (A) and human SUG1 transfected: sc-172033 (B) 293 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.