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SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

Stim1 (h2): 293T Lysate: sc-171959

BACKGROUND

Ca²⁺ influx is essential for a variety of cellular functions, including secretion and transcription. Stromal interaction molecule 1 (Stim1) is a ubiquitously expressed cell surface transmembrane glycoprotein that plays a role in mediating Ca²⁺ influx following the depletion of intracellular Ca²⁺ stores. Stim1 functions in the endoplasmic reticulum (ER) where it acts as a Ca²⁺ sensor via its EF-hand domain, causing large conformational changes. When Ca²⁺ levels drop, Stim1 translocates from the ER to the plasma membrane, where it activates the calcium release-activated calcium (CRAC) channel subunit, TMEM142A/Orai1. Stim2 is a potent inhibitor of Stim1-mediated, store-operated calcium (SOC) entry. Stim1 is implicated in tumor growth suppression and stromal-hematopoietic cell interactions.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: STIM1 (human) mapping to 11p15.4.

PRODUCT

Stim1 (h2): 293T Lysate represents a lysate of human Stim1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

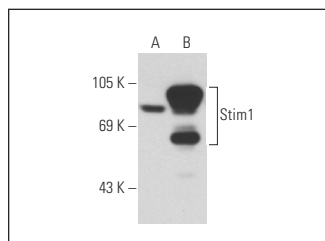
APPLICATIONS

Stim1 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Stim1 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.

Stim1 (CDN3H4): sc-66173 is recommended as a positive control antibody for Western Blot analysis of enhanced human Stim1 expression in Stim1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



Stim1 (CDN3H4): sc-66173. Western blot analysis of Stim1 expression in non-transfected: sc-117752 (A) and human Stim1 transfected: sc-171959 (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.

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.