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- Expressversand

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# GTSE-1 (h3): 293T Lysate: sc-176698

## BACKGROUND

GTSE-1 (G<sub>2</sub> and S-phase expressed 1) is also known as B99 homolog and is a 720 amino acid protein. GTSE-1 is localized to the cytoplasm where it colocalizes with cytoplasmic Tubulin and microtubules during the S and G<sub>2</sub> phases of the cell cycle. Upregulation of GTSE-1 leads to a delay in the transition from the G<sub>2</sub> phase to the M phase, during which GTSE-1 is phosphorylated and subsequently reduced in the G<sub>1</sub> phase. GTSE-1 can shuttle between the cytoplasm and the nucleus, unless hindered by Leptomycin B which prevents its nuclear export, causing GTSE-1 accumulation in the nucleus. In the case of DNA damage, GTSE-1 accumulates in the nucleus and binds to the tumor suppressor protein DSCP1, an event that results in the transport of DSCP1 to the cytoplasm and regulates DSCP1 stability and function during the cell cycle. DSCP1 is subsequently degraded by the ubiquitin-proteasome pathway in the cytoplasm.

## REFERENCES

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6. Online Mendelian Inheritance in Man, OMIM™. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 607477. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
7. Brown, L., Boswell, S., Raj, L. and Lee, S.W. 2007. Transcriptional targets of p53 that regulate cellular proliferation. *Crit. Rev. Eukaryot. Gene Expr.* 17: 73-85.

## CHROMOSOMAL LOCATION

Genetic locus: GTSE1 (human) mapping to 22q13.31.

## PRODUCT

GTSE-1 (h3): 293T Lysate represents a lysate of human GTSE-1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

GTSE-1 (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive GTSE-1 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.

## 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

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