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## Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

## Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand


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SANTA CRUZ BIOTECHNOLOGY, INC.

# ferritin light chain (h2): 293T Lysate: sc-170823

## BACKGROUND

Mammalian ferritins consist of 24 subunits made up of two types of polypeptide chains, ferritin heavy chain and ferritin light chain, which each have unique functions. Ferritin heavy chains catalyze the first step in iron storage, the oxidation of Fe (II), whereas ferritin light chains promote the nucleation of ferrihydrite, enabling storage of Fe (III). The most prominent role of mammalian ferritins is to provide iron-buffering capacity to cells. In addition to iron buffering, heavy chain ferritin is also involved in the regulation of thymidine biosynthesis via increased expression of cytoplasmic serine hydroxymethyltransferase, which is a limiting factor in thymidylate synthesis in MCF7 cells. Light chain ferritin is involved in cataracts by at least two mechanisms, hereditary hyperferritinemia cataract syndrome, in which light chain ferritin is overexpressed, and oxidative stress, an important factor in the development of ageing-related cataracts. The gene encoding human ferritin heavy chain maps to chromosome 11q12.3 and the human ferritin light chain gene maps to chromosome 19q13.33.

## REFERENCES


1. Worwood, M., Brook, J.D., Cragg, S.J., Hellkuhl, B., Jones, B.M., Perera, P., Roberts, S.H. and Shaw, D.J. 1985. Assignment of human ferritin genes to chromosomes 11 and 19q13.3—19qter. Hum. Genet. 69: 371-374.
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3. Cheng, Q., Gonzalez, P. and Zigler, J.S.J. 2000. High level of ferritin light chain mRNA in lens. Biochem. Biophys. Res. Commun. 270: 349-355.
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6. LocusLink Report (LocusID: 2512). http://www.ncbi.nlm.nih.gov/LocusLink/


## CHROMOSOMAL LOCATION

Genetic locus: FTL (human) mapping to 19q13.33.

## PRODUCT

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

## 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.

## APPLICATIONS

ferritin light chain (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive ferritin light chain antibodies. Recommended use: 10-20 µl per lane.

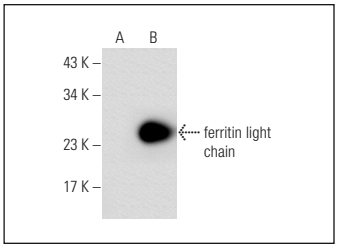
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

ferritin light chain (D-9): sc-74513 is recommended as a positive control antibody for Western Blot analysis of enhanced human ferritin light chain expression in ferritin light chain 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-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA




ferritin light chain (D-9): sc-74513. Western blot analysis of ferritin light chain expression in non-transfected: sc-117752 (**A**) and human ferritin light chain transfected: sc-170823 (**B**) 293T whole cell lysates.

## RESEARCH USE

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