

CD71 (h): 293T Lysate: sc-175273

BACKGROUND

CD71, also known as the transferrin receptor (TFR), is a type II membrane glycoprotein that exists as a disulfide-linked homodimer of two identical subunits. CD71 binds to two molecules of transferrin and a serum iron-transport protein, and directs the cellular uptake of iron via receptor-mediated endocytosis. CD71 is expressed, typically at high levels, on all proliferating cells, reticulocytes and erythroid precursors. It is not expressed on resting leukocytes, but is upregulated upon activation of lymphocytes, monocytes and macrophages. CD71 is also found on most dividing cells and on brain endothelium. A second transferrin receptor, TFR2, also mediates the uptake of transferrin-bound iron. TFR2 is a two-subunit homodimer and is highly expressed in liver as well as in hepatocytes and erythroid precursors. Mutations in the TFR2 gene result in hereditary hemochromatosis type III (HFE3), an iron overloading disorder predominant in Caucasians.

REFERENCES

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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.

CHROMOSOMAL LOCATION

Genetic locus: TFRC (human) mapping to 3q29.

PRODUCT

CD71 (h): 293T Lysate represents a lysate of human CD71 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

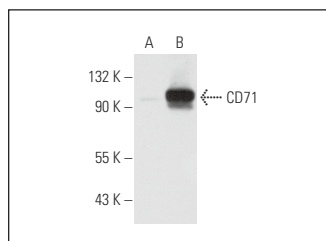
APPLICATIONS

CD71 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive CD71 antibodies. Recommended use: 10-20 µl per lane.

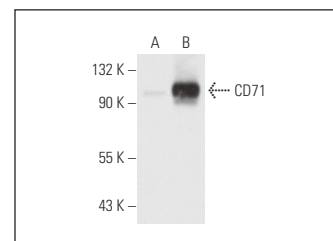
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

CD71 (2B6): sc-51829 is recommended as a positive control antibody for Western Blot analysis of enhanced human CD71 expression in CD71 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



CD71 (2B6): sc-51829. Western blot analysis of CD71 expression in non-transfected: sc-117752 (A) and human CD71 transfected: sc-175273 (B) 293T whole cell lysates.



CD71 (7F8): sc-51832. Western blot analysis of CD71 expression in non-transfected: sc-117752 (A) and human CD71 transfected: sc-175273 (B) 293T whole cell lysates.

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.