transferrin (F-8): sc-373785

**BACKGROUND**

Iron (Fe) is a tightly metabolically controlled mineral and growth factor present in all living cells. Iron not bound in erythrocyte hemoglobin is transported by transferrin (Tf), the iron transport protein of vertebrate serum. The transferrin protein contains two homologous domains, each of which contain an Fe-binding site. The majority of transferrin is synthesized in the liver and secreted into the blood, but it is also produced in lower amounts in testis and brain as well as in oligodendrocytes, where transferrin is an early marker of oligodendrocyte differentiation. From the blood, transferrin is internalized by erythroblasts and reticulocytes upon binding the transferrin receptor (TfR), also designated CD71, through a system of coated pits and vesicles. After Fe release, transferrin is returned to the extracellular medium, where it can be reused. Defects in the transferrin gene result in atransferrinemia, a rare autosomal recessive disorder characterized by microcytic anemia and iron loading.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: Trf (mouse) mapping to 9 F1.

**SOURCE**

transferrin (F-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 420-453 within an internal region of transferrin of mouse origin.

**PRODUCT**

Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.2% stabilizer.

transferrin (F-8) is available conjugated to agarose (sc-373785 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-373785 HRP), 200 µg/ml, for WB, HCPI and ELISA; to either phcoerythrin (sc-373785 PE), fluorescein (sc-373785 FITC), Alexa Fluor® 488 (sc-373785 AF488), Alexa Fluor® 546 (sc-373785 AF546), Alexa Fluor® 594 (sc-373785 AF594) or Alexa Fluor® 647 (sc-373785 AF647), 200 µg/ml, for WB (RGB), IF, HCPI and FCM; and to either Alexa Fluor® 680 (sc-373785 AF680) or Alexa Fluor® 790 (sc-373785 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-373785 P (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**

transferrin (F-8) is recommended for detection of transferrin of mouse origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:300-1:3000).

Suitable for use as control antibody for transferrin siRNA (m): sc-37177, transferrin shRNA Plasmid (m): sc-37177-SH and transferrin shRNA (m) Lentiviral Particles: sc-37177-V.

Molecular Weight of transferrin: 79 kDa.

Positive Controls: mouse liver extract: sc-2256 or c4 whole cell lysate: sc-364186.

**DATA**

transferrin (F-8): sc-373785. Near-infrared western blot analysis of transferrin expression in Hep G2 whole cell lysate. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgG

Corning® T4, sc-516181.

132 K –

109 K –

87 K –

51 K –

55 K –

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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