CBS (B-4): sc-133154

BACKGROUND

Strongly expressed in human liver and pancreas, with weaker expression in heart and brain, the cytoplasmic protein cystathionine β-synthase (CBS) operates in the first step of homocysteine transulfuration. CBS, which belongs to the cysteine synthase/cystathionine β-synthase family of proteins, catalyzes the formation of cystathionine from the thiorbogenic amino acid homocysteine using pyridoxal phosphate cofactor. Allosteric activation by adenosyl-methionine regulates CBS activity. Deficiencies in CBS are associated with homocystinuria, a recessively inherited error in sulfur amino acid metabolism that affects many organs and tissues. Symptoms of homocystinuria include arteriosclerosis, thrombosis, dislocated optic lenses, mental retardation and skeletal abnormalities.

CHROMOSOMAL LOCATION

Genetic locus: CBS (human) mapping to 21q22.3; CBS (mouse) mapping to 17 B1.

SOURCE

CBS (B-4) is a mouse monoclonal antibody raised against amino acids 101-400 mapping within an internal region of CBS of human origin.

PRODUCT

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

CBS (B-4) is available conjugated to agarose (sc-133154 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-133154 HRP), 200 µg/ml, for WB, IHC(p) and ELISA; to either phycoerythrin (sc-133154 PE), fluorescein (sc-133154 FITC), Alexa Fluor® 488 (sc-133154 AF488), Alexa Fluor® 546 (sc-133154 AF546), Alexa Fluor® 594 (sc-133154 AF594), or Alexa Fluor® 647 (sc-133154 AF647), 200 µg/ml, for WB (RGB), IF, IHC(p) and FCM; and to either Alexa Fluor® 680 (sc-133154 AF680) or Alexa Fluor® 790 (sc-133154 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

CBS (B-4) is recommended for detection of CBS of mouse, rat and human 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of CBS: 63 kDa.

Positive Controls: MOLT-4 cell lysate: sc-2233, HeLa whole cell lysate: sc-2200 or CS whole cell lysate: sc-364373.

DATA

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

SELECT PRODUCT CITATIONS


RESEARCH USE

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

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