SANTA CRUZ BIOTECHNOLOGY, INC.

Selenoprotein M marker (4C2): sc-59690

BACKGROUND

Selenium is an essential trace element that is incorporated as selenocysteine into the primary structure of selenoproteins. Nutritional deficiency of selenium decreases selenoprotein concentrations and leads to pathologic conditions. Most of the known selenoproteins are members of the glutathione peroxidase or iodothyronine deiodinase families. SECIS elements form stem-loop structures in the 3' untranslated regions (UTR) of eukaryotic mRNAs that encode selenoproteins. Selenoprotein P is an extracellular glycoprotein that is the only selenoprotein known to contain multiple selenocysteine residues. The Selenoprotein W SECIS elements contain an additional highly conserved base-paired stem that may prevent inappropriate selenocysteine incorporation at the UGA stop codons. Selenoprotein R may play a role in protection against oxidative stress. Selenoprotein N is primarily expressed in skeletal muscle, brain, lung and placenta, and may be associated with multiminicore disease and rigid spine muscular dystrophy. Selenoprotein M may have a functional role in catalyzing free radicals and has been associated with Alzheimer's disease.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SELM (human) mapping to 22q12.2.

SOURCE

Selenoprotein M marker (4C2) is a mouse monoclonal antibody raised against full length Selenoprotein M of human origin.

PRODUCT

Each vial contains 100 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Selenoprotein M marker (4C2) is recommended for detection of Selenoprotein M marker of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Selenoprotein M siRNA (h): sc-76470, Selenoprotein M shRNA Plasmid (h): sc-76470-SH and Selenoprotein M shRNA (h) Lentiviral Particles: sc-76470-V.

STORAGE

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

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.