SANTA CRUZ BIOTECHNOLOGY, INC.

Galactose Mutarotase (m): 293T Lysate: sc-120388

BACKGROUND

Galactose Mutarotase is a member of the aldose epimerase family and is involved in hexose metabolism. Through its catalytic activity, Galactose Mutarotase converts β-aldose to α-aldose on several sugars, including D-glucose, L-arabinose and D-xylose. Found in the cytoplasm of most cells, Galactose Mutarotase plays a key role in galactose metabolism by catalyzing the conversion of β-D-galactose to α-D-galactose. The enzyme contains two residues, Glu 304 and His 170, that are critical for catalysis, as well as His 96 and Asp 243, which are important for proper substrate recognition by the active site. No known diseases have been associated with mutations in the Galactose Mutarotase gene, although inhibition of Galactose Mutarotase activity could potentially be associated with a build-up of unmetabolized sugars during metabolism.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Galm (mouse) mapping to 17 E3.

RESEARCH USE

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

PRODUCT

Galactose Mutarotase (m): 293T Lysate represents a lysate of mouse Galactose Mutarotase transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Galactose Mutarotase (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Galactose Mutarotase antibodies. Recommended use: 10-20 µl per lane.

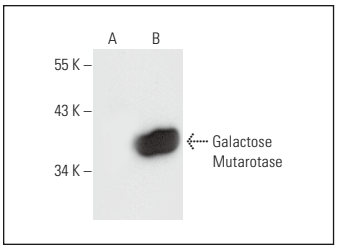
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Galactose Mutarotase (H-7): sc-166304 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Galactose Mutarotase expression in Galactose Mutarotase transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

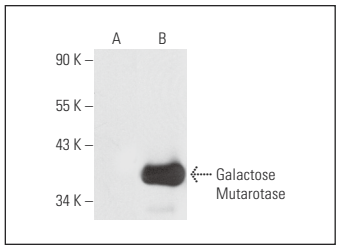
RECOMMENDED SUPPORT REAGENTS

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



Galactose Mutarotase (H-7): sc-166304. Western blot analysis of Galactose Mutarotase expression in non-transfected: sc-117752 (**A**) and mouse Galactose Mutarotase transfected: sc-120388 (**B**) 293T whole cell lysates.



Galactose Mutarotase (C-4): sc-166471. Western blot analysis of Galactose Mutarotase expression in non-transfected: sc-117752 (**A**) and mouse Galactose Mutarotase transfected: sc-120388 (**B**) 293T whole cell lysates.

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.