

TGaseZ (L-14): sc-55334

BACKGROUND

Terminally differentiating mammalian epidermal cells acquire an insoluble, 10 to 20 nm thick protein deposit on the intracellular surface of the plasma membrane known as the cross-linked cell envelope (CE). The CE is a component of the epidermis that is generated through formation of disulfide bonds and γ -glutamyl-lysine isodipeptide bonds, which are formed by the action of transglutaminases (TGases). TGases are intercellularly localizing, Ca^{2+} -dependent enzymes, which catalyze the formation of isopeptide bonds by transferring an amine on to glutamyl residues, thereby cross-linking glutamine residues and lysine residues in substrate proteins. TGases influence numerous biological processes including blood coagulation, epidermal differentiation, seminal fluid coagulation, fertilization, cell differentiation and apoptosis. TGaseZ, also known as TGMZ or TGM7 (transglutaminase 7) is a typical transglutaminase expressed in a wide variety of tissues with predominant expression in lung and testis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TGM7 (human) mapping to 15q15.2; Tgm7 (mouse) mapping to 2 E5.

SOURCE

TGaseZ (L-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TGaseZ of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-55334 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TGaseZ (L-14) is recommended for detection of TGaseZ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TGaseZ (L-14) is also recommended for detection of TGaseZ in additional species, including canine and porcine.

Suitable for use as control antibody for TGaseZ siRNA (h): sc-63119, TGaseZ siRNA (m): sc-63120, TGaseZ shRNA Plasmid (h): sc-63119-SH, TGaseZ shRNA Plasmid (m): sc-63120-SH, TGaseZ shRNA (h) Lentiviral Particles: sc-63119-V and TGaseZ shRNA (m) Lentiviral Particles: sc-63120-V.

Molecular Weight of TGaseZ: 80 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

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 or our catalog for detailed protocols and support products.