SANTA CRUZ BIOTECHNOLOGY, INC.

LYG1 (D-12): sc-137588

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The origins of the lysozyme proteins date back an estimated 400 to 600 million years. Generally, lysozyme genes are relatively small, roughly 10 kilobases in length, and are composed of four exons and 3 introns. Originally a bacteriolytic defensive agent, the function of this family of proteins adapted to serve a digestive function in its present forms. Lysozymes in tissues and body fluids are associated with the monocyte-macrophage system and enhance the activity of immunoagents. LYG1 (lysozyme G-like 1) is a 194 amino acid secreted protein that belongs to the glycosyl hydrolase 23 family. The gene encoding LYG1 maps to human chromosome 2, which consists of 237 million bases, encodes over 1,400 genes and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2 including Harlequin icthyosis, sitosterolemia and Alström syndrome.

REFERENCES

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5. Zumsteg, U., et al. 2000. Alstrom syndrome: confirmation of linkage to chromosome 2p12-13 and phenotypic heterogeneity in three affected sibs. J. Med. Genet. 37: E8.
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8. Irwin, D.M., et al. 2003. Molecular evolution of vertebrate goose-type lysozyme genes. J. Mol. Evol. 56: 234-242.
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CHROMOSOMAL LOCATION

Genetic locus: LYG1 (human) mapping to 2q11.2; Lyg1 (mouse) mapping to 1 B.

SOURCE

LYG1 (D-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of LYG1 of human origin.

RESEARCH USE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-137588 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LYG1 (D-12) is recommended for detection of LYG1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with LYG2 .

Suitable for use as control antibody for LYG1 siRNA (h): sc-94518, LYG1 siRNA (m): sc-149171, LYG1 shRNA Plasmid (h): sc-94518-SH, LYG1 shRNA Plasmid (m): sc-149171-SH, LYG1 shRNA (h) Lentiviral Particles: sc-94518-V and LYG1 shRNA (m) Lentiviral Particles: sc-149171-V.

Molecular Weight of LYG1: 21 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.