SANTA CRUZ BIOTECHNOLOGY, INC.

ALOXE3 (Q-13): sc-133274

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

ALOXE3 (arachidonate lipoxygenase 3), also known as E-LOX or eLOX3, is a 711 amino acid protein that is involved in lipid metabolism and contains one lipoxygenase domain and one PLAT domain. Expressed predominately in skin, ALOXE3 uses iron as a cofactor to introduce oxygen into polyunsaturated fatty acids and is thought to play an important role in the catabolism of leukotrienes (arachidonic acid-derived compounds which participate in inflammation and hypersensitivity). Defects in the gene encoding ALOXE3 are the cause of non-bullous congenital ichthyosiform erythroderma (NCIE), a skin disorder characterized by an abnormal cornification of the epidermis, with symptoms including scaling and red skin, as well as painful fissures resulting from palmoplantar keratoderma.

REFERENCES

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5. Eckl, K.M., Krieg, P., Küster, W., Traupe, H., Andre, F., Wittstruck, N., Fürstenberger, G. and Hennies, H.C. 2005. Mutation spectrum and functional analysis of epidermis-type lipoxygenases in patients with autosomal recessive congenital ichthyosis. Hum. Mutat. 26: 351-361.
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CHROMOSOMAL LOCATION

Genetic locus: Aloxe3 (mouse) mapping to 11 B3.

SOURCE

ALOXE3 (Q-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ALOXE3 of mouse 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-133274 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ALOXE3 (Q-13) is recommended for detection of ALOXE3 of mouse and rat 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), 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).

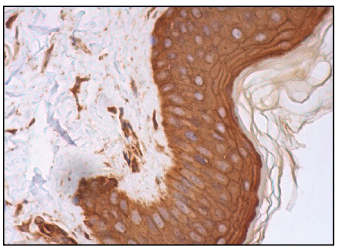
Suitable for use as control antibody for ALOXE3 siRNA (m): sc-141028, ALOXE3 shRNA Plasmid (m): sc-141028-SH and ALOXE3 shRNA (m) Lentiviral Particles: sc-141028-V.

Molecular Weight of ALOXE3: 81 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



ALOXE3 (Q-13): sc-133274. Immunoperoxidase staining of formalin fixed, paraffin-embedded human skin tissue showing cytoplasmic staining of fibroblasts, keratinocytes, Langerhans cells and melanocytes.

STORAGE

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