SANTA CRUZ BIOTECHNOLOGY, INC.

Trichohyalin (K-16): sc-47515

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Trichohyalin is a nine domain-containing structural protein that is produced in the medulla and inner root sheath of hair follicles. Among the structural motifs are two ERF-hand calcium-binding domains located in domain 1. It is a member of the S100-fused protein family and a substrate of transglutaminase and peptidylarginine deaminase. Trichohyalin associates with keratin intermediate filaments (KIF) and peripheral cell envelope barrier proteins to coordinate cornified cell envelope organization.

REFERENCES

1. O'Guin, W.M., et al. 1992. Interaction of Trichohyalin with intermediate filaments: three immunologically defined stages of Trichohyalin maturation. J. Invest. Dermatol. 98: 24-32.
2. Lee, S.C., et al. 1993. The structure of human Trichohyalin. Potential multiple roles as a functional EF-hand-like calcium-binding protein, a cornified cell envelope precursor, and an intermediate filament-associated (cross-linking) protein. J. Biol. Chem. 268: 12164-12176.
3. Manabe, M. and O'Guin, W.M. 1995. Existence of Trichohyalin-keratohyalin hybrid: two major intermediate filament-associated proteins in non-follicular epithelia. Differentiation 58: 65-75.

CHROMOSOMAL LOCATION

Genetic locus: TCHH (human) mapping to 1q21.3.

SOURCE

Trichohyalin (K-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Trichohyalin 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-47515 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Trichohyalin (K-16) is recommended for detection of Trichohyalin 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)], 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).

Trichohyalin (K-16) is also recommended for detection of Trichohyalin in additional species, including equine.

Suitable for use as control antibody for Trichohyalin siRNA (h): sc-106636, Trichohyalin shRNA Plasmid (h): sc-106636-SH and Trichohyalin shRNA (h) Lentiviral Particles: sc-106636-V.

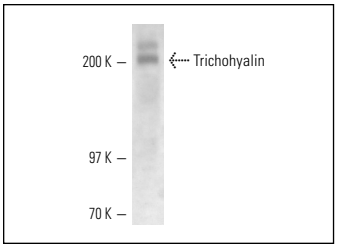
Molecular Weight of Trichohyalin: 200-220 kDa.

Positive Controls: CCD-1064Sk cell lysate: sc-2263.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



Trichohyalin (K-16): sc-47515. Western blot analysis of Trichohyalin expression in CCD-1064Sk whole cell lysate.

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.