

Repetin (N-17): sc-248391

BACKGROUND

Repetin (RPTN) is a 784 amino acid secreted protein that belongs to the S100-fused protein family. Repetin is an extracellular epidermal matrix protein that is expressed in the epidermis and at high levels in eccrine sweat glands, the inner sheaths of hair roots and the filiform papilli of the tongue. A multifunctional epidermal matrix protein, Repetin is involved in the cornified cell envelope formation. Containing two EF-hand domains, the recombinant N-terminal domain of Repetin binds calcium reversibly. Repetin and trichohyalin may compensate for absent loricrin. The Repetin gene contains three exons, two introns and spans at least 5.6 kb. The Repetin gene is conserved in canine, mouse and rat.

REFERENCES

1. Krieg, P., et al. 1997. Repetin (Rptn), a new member of the "fused gene" subgroup within the S100 gene family encoding a murine epidermal differentiation protein. *Genomics* 43: 339-348.
2. Steinert, P.M. 2000. The complexity and redundancy of epithelial barrier function. *J. Cell Biol.* 151: F5-F8.
3. Makino, T., et al. 2001. Hornerin, a novel profilaggrin-like protein and differentiation-specific marker isolated from mouse skin. *J. Biol. Chem.* 276: 47445-47452.
4. Foell, D., et al. 2004. Phagocyte-specific calcium-binding S100 proteins as clinical laboratory markers of inflammation. *Clin. Chim. Acta* 344: 37-51.
5. Huber, M., et al. 2005. Isolation and characterization of human repetin, a member of the fused gene family of the epidermal differentiation complex. *J. Invest. Dermatol.* 124: 998-1007.
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CHROMOSOMAL LOCATION

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

SOURCE

Repetin (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Repetin 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-248391 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

Repetin (N-17) is recommended for detection of Repetin of human 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Repetin (N-17) is also recommended for detection of Repetin in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Repetin siRNA (h): sc-88601, Repetin shRNA Plasmid (h): sc-88601-SH and Repetin shRNA (h) Lentiviral Particles: sc-88601-V.

Molecular Weight of Repetin: 91 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.

PROTOCOLS

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