# SANTA CRUZ BIOTECHNOLOGY, INC.

# Tuftelin (C-16): sc-47535



## BACKGROUND

Dental enamel is a highly mineralized tissue in which most of the volume is occupied by large, highly organized, hydroxyapatite crystals. This structure is thought to be controlled through the interaction of many organic matrix molecules, including Amelogenin, Ameloblastin, Enamelin and Tuftelin. All of these secreted proteins are involved in the mineralization and enamel matrix formation in developing tooth enamel. Tuftelin is also expressed in normal and cancerous non-mineralizing soft tissues, which suggests it has a universal function and/or a multifunctional role. The Tuftelin protein contains one N-glycosylation site, seven O-glycosylation sites and seven phosphorylation sites. It also contains a coiled-coil domain that is involved in self-assembly and the interaction of Tuftelin with the Tuftelin interacting protein TIP39.

#### REFERENCES

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# CHROMOSOMAL LOCATION

Genetic locus: TUFT1 (human) mapping to 1q21.3; Tuft1 (mouse) mapping to 3 F2.1.

# SOURCE

Tuftelin (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Tuftelin of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-47535 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### STORAGE

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# APPLICATIONS

Tuftelin (C-16) is recommended for detection of Tuftelin isoforms 1, 2, and 3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

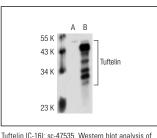
Tuftelin (C-16) is also recommended for detection of Tuftelin isoforms 1, 2 and 3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Tuftelin siRNA (h): sc-61736, Tuftelin siRNA (m): sc-61737, Tuftelin shRNA Plasmid (h): sc-61736-SH, Tuftelin shRNA Plasmid (m): sc-61737-SH, Tuftelin shRNA (h) Lentiviral Particles: sc-61736-V and Tuftelin shRNA (m) Lentiviral Particles: sc-61737-V.

Molecular Weight of Tuftelin: 44 kDa.

Positive Controls: Tuftelin (m): 293T Lysate: sc-124366 or HeLa whole cell lysate: sc-2200.

#### DATA



Iurtelin (L-16): sc-4/533. Western biot analysis of Tuftelin expression in non-transfected: sc-117752 (A) and mouse Tuftelin transfected: sc-124366 (B) 293T whole cell lysates.

#### **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.

# MONOS Satisfation Guaranteed

Try **Tuftelin (G-11): sc-365632**, our highly recommended monoclonal alternative to Tuftelin (C-16).