

# ODAM (L-20): sc-82266

## BACKGROUND

ODAM (odontogenic ameloblast-associated protein), also known as APIN or FLJ20513, is a 279 amino acid secreted protein. Heavily O-glycosylated, ODAM is an epithelial protein that may have a role in odontogenesis, the process that results in generation of teeth. ODAM is also thought to be integrated into the enamel matrix at the end of the mineralization process during tooth formation. The ODAM protein has also been found to be the unique constituent of calcifying epithelial odontogenic tumors (CEOTs), also known as Pindborg tumors, which are benign yet locally aggressive pathologic entities commonly associated with an embedded or unerupted tooth. The gene that encodes ODAM maps to human chromosome 4q13.3.

## REFERENCES

- Solomon, A., et al. 2003. Calcifying epithelial odontogenic (Pindborg) tumor-associated amyloid consists of a novel human protein. *J. Lab. Clin. Med.* 142: 348-355.
- Moffatt, P., et al. 2006. Identification of secreted and membrane proteins in the rat incisor enamel organ using a signal-trap screening approach. *Eur. J. Oral Sci.* 114: 139-146.
- Murphy, C.L., et al. 2008. Odontogenic ameloblast-associated protein nature of the amyloid found in calcifying epithelial odontogenic tumors and unerupted tooth follicles. *Amyloid* 15: 89-95.
- Moffatt, P., et al. 2008. Characterization of Apin, a secreted protein highly expressed in tooth-associated epithelia. *J. Cell. Biochem.* 103: 941-956.
- Kestler, D.P., et al. 2008. Expression of odontogenic ameloblast-associated protein (ODAM) in dental and other epithelial neoplasms. *Mol. Med.* 14: 318-326.
- Fenner, B.J., et al. 2010. Expanding the substantial interactome of NEMO using protein microarrays. *PLoS ONE* 5: e8799.

## CHROMOSOMAL LOCATION

Genetic locus: ODAM (human) mapping to 4q13.3.

## SOURCE

ODAM (L-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ODAM 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-82266 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

ODAM (L-20) is recommended for detection of ODAM 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).

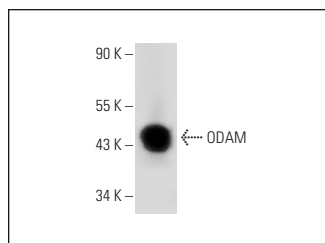
Suitable for use as control antibody for ODAM siRNA (h): sc-75989, ODAM shRNA Plasmid (h): sc-75989-SH and ODAM shRNA (h) Lentiviral Particles: sc-75989-V.

Molecular Weight of ODAM: 31 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) 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



ODAM (L-20): sc-82266. Western blot analysis of human recombinant ODAM.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.