

## **Supplementary Information**

### **Supplementary materials and methods**

This clinical study using the patients' information was done under the permission of the ethics committee in Fukuoka Dental College (ID number: 339). The patients had signed a written informed consent form or were given an opportunity to opt-out. 9 cases of dentigerous cyst (Male/Female: 5/4, mean age: 44.6, range: 129-67) were examined.

## Supplementary figures and table

Supplementary Table 1: Summary of the clinicopathological characteristics of dentigerous cyst patients examined

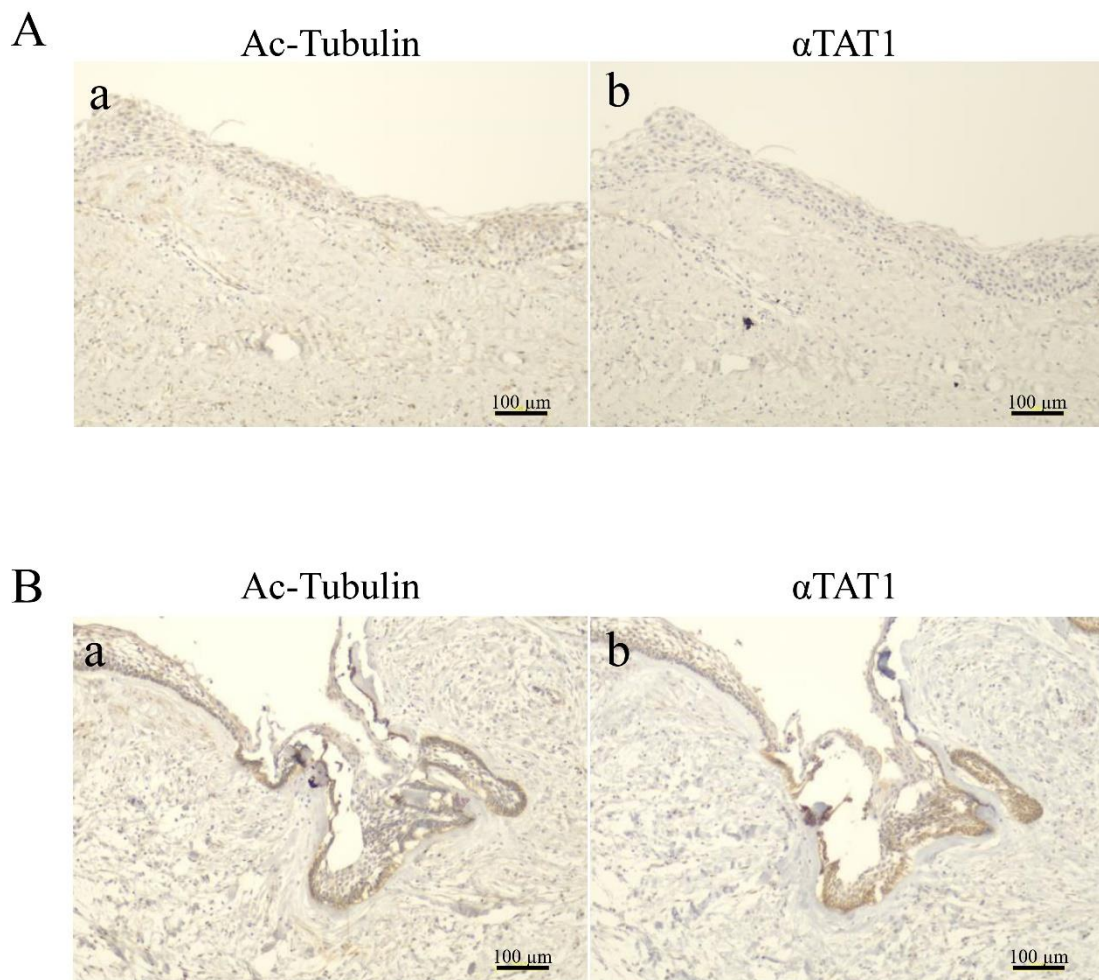
Characteristics	Number of patients	Immunohistochemical score (range: 0-3)	
Age	Mean: 44.6 (range: 29-67)		
Sex	Male	5	
	Female	4	
Pathological diagnosis		Ac-Tubulin	$\alpha$ TAT1
Dentigerous cyst	9	0.44	0.22

Supplementary Table 1: **Summary of the clinicopathological characteristics of dentigerous cyst**

**patients examined.** The 9 cases of dentigerous cyst (Male/Female: 5/4, mean age: 44.6, range: 129-

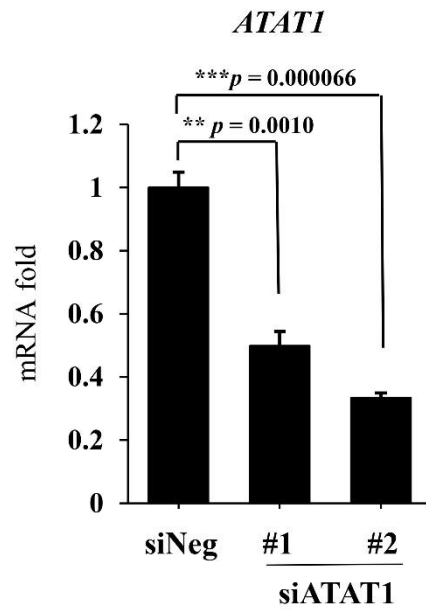
67) were examined.

Supplementary Figure 1



Supplementary Figure 1. **Immunohistochemical analyses of acetylated  $\alpha$ -tubulin and  $\alpha$ TAT1 expressions in dentigerous cyst and unicystic ameloblastoma.** A, Acetylated  $\alpha$ -tubulin (Ac-Tubulin) (a) and  $\alpha$ TAT1 (b) expressions in dentigerous cyst are shown. B, Acetylated  $\alpha$ -tubulin (Ac-Tubulin) (a) and  $\alpha$ TAT1 (b) expressions in unicystic ameloblastoma are shown. Scale bars: 100  $\mu$ m.

Supplementary Figure 2



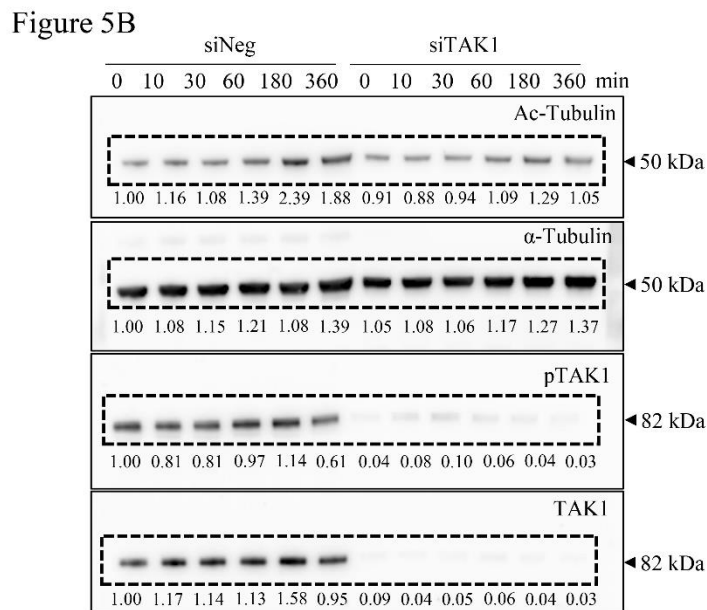
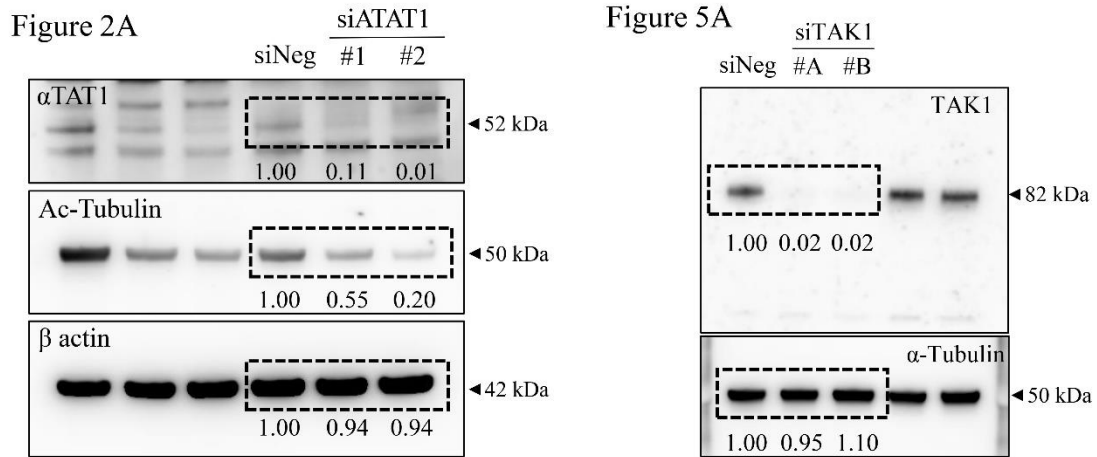
Supplementary Figure 2. **Inhibition analysis of ATAT1 mRNA expression with two different**

**siRNAs specific for ATAT1 (siATAT1) on AM-1 cells.** Both #1 and #2 siRNAs statistically repress

ATAT1 mRNA expression compared to that in control (siNeg). Statistical significance was set as

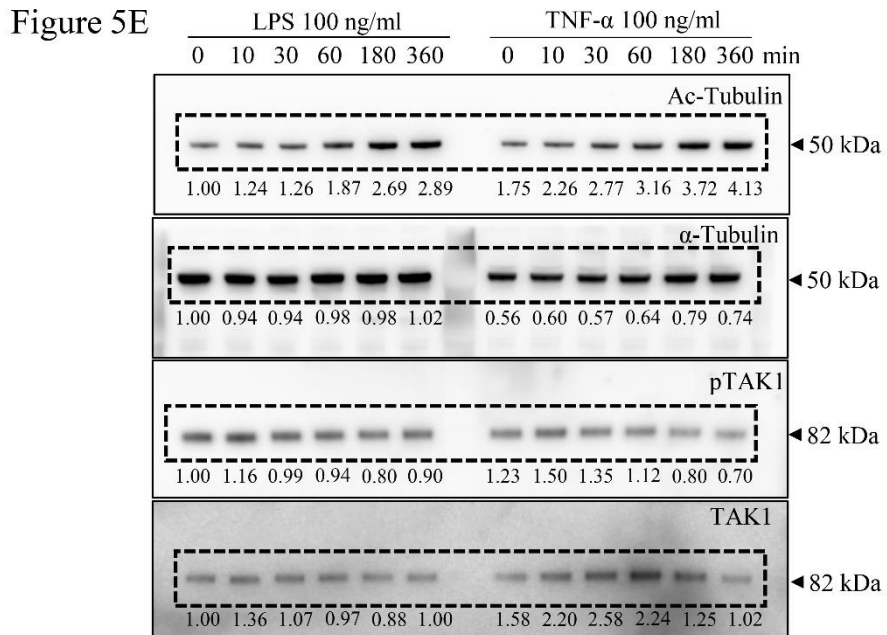
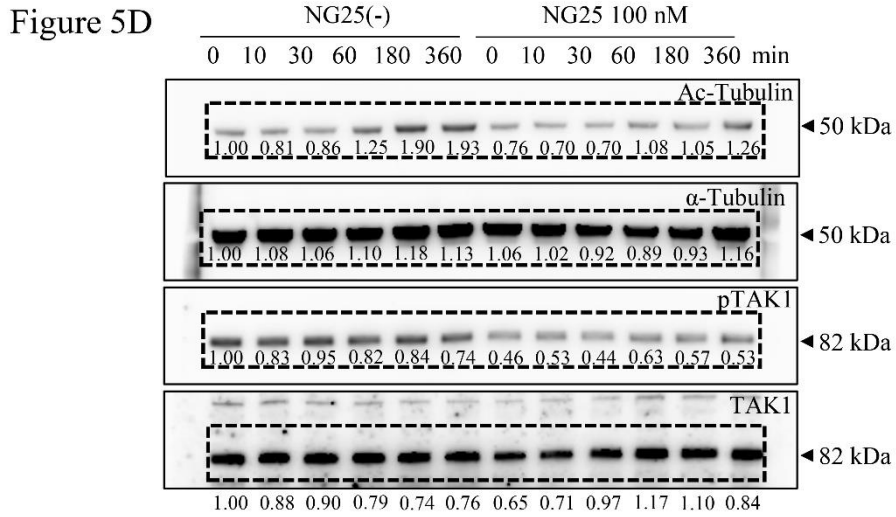
\* $p < 0.05$  and \*\*\* $p < 0.001$  (n=4).

Supplementary Figure 3



Supplementary Figure 3. **Original images of western blot.** Original images of western blot in Figure 2A, 5A and 5B. Images using in each figure are encircled by dotted lines. Intensity of blotting images are quantified using ImageJ, and each value is indicated under each band.

Supplementary Figure 4



Supplementary Figure 4. **Original images of western blot.** Original images of western blot in Figure 5D and 5E. Images using in each figure are encircled by dotted lines. Intensity of blotting images are quantified using ImageJ, and each value is indicated under each band.