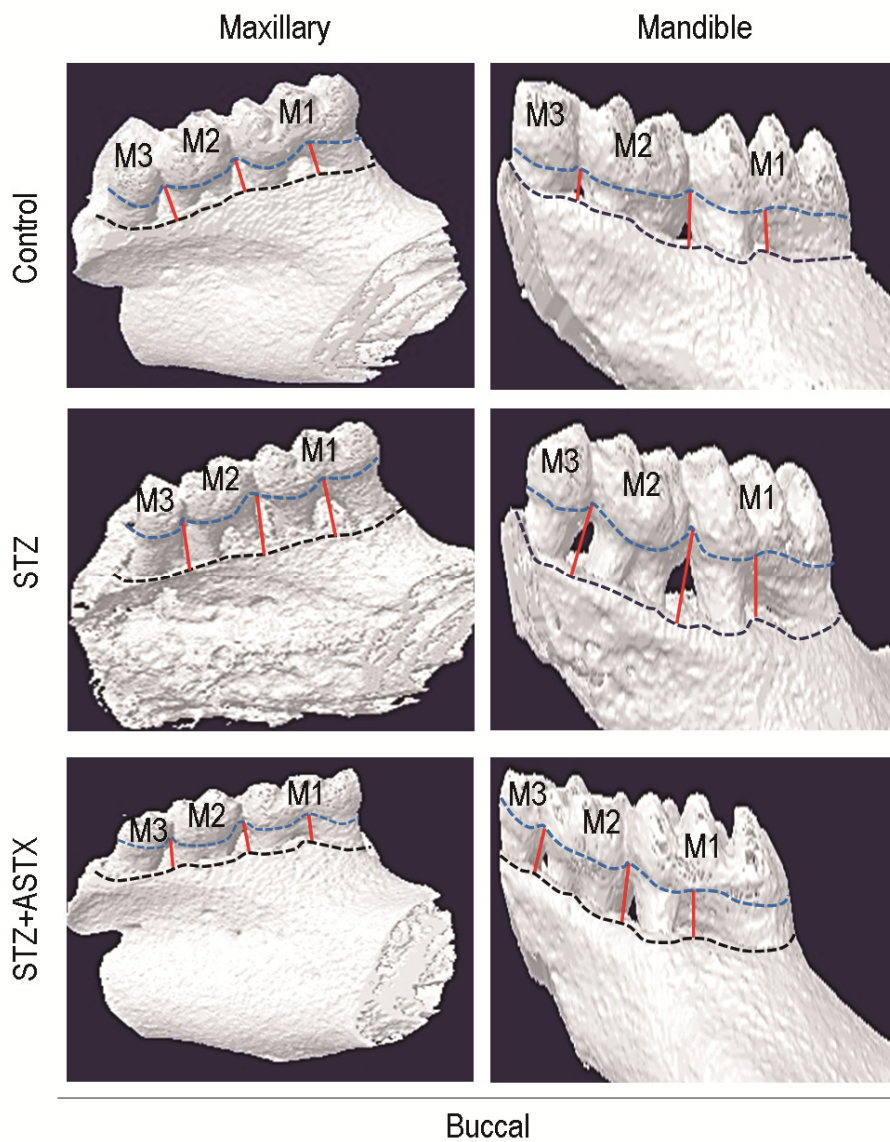
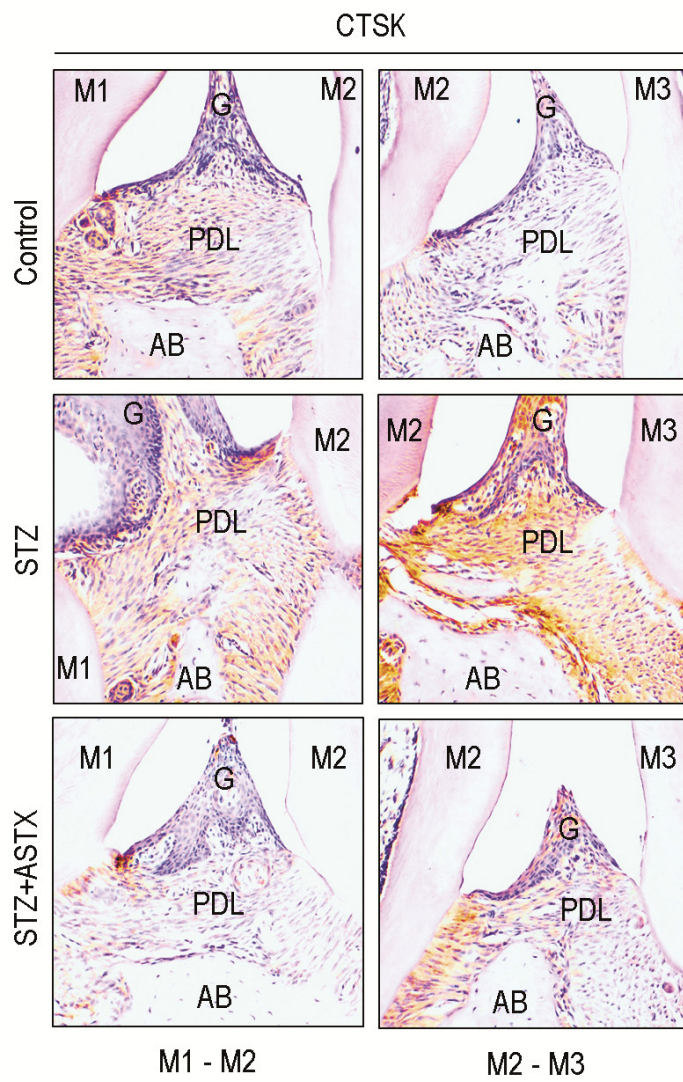


**Figure S1.** Oral supplementation with ASTX does not protect STZ-induced damage in pancreatic islets.

Pancreatic tissue sections were stained with H & E 60 days after the hyperglycemia induction. A representative result from five different samples is shown. The yellow dash lines indicate the pancreatic islets.

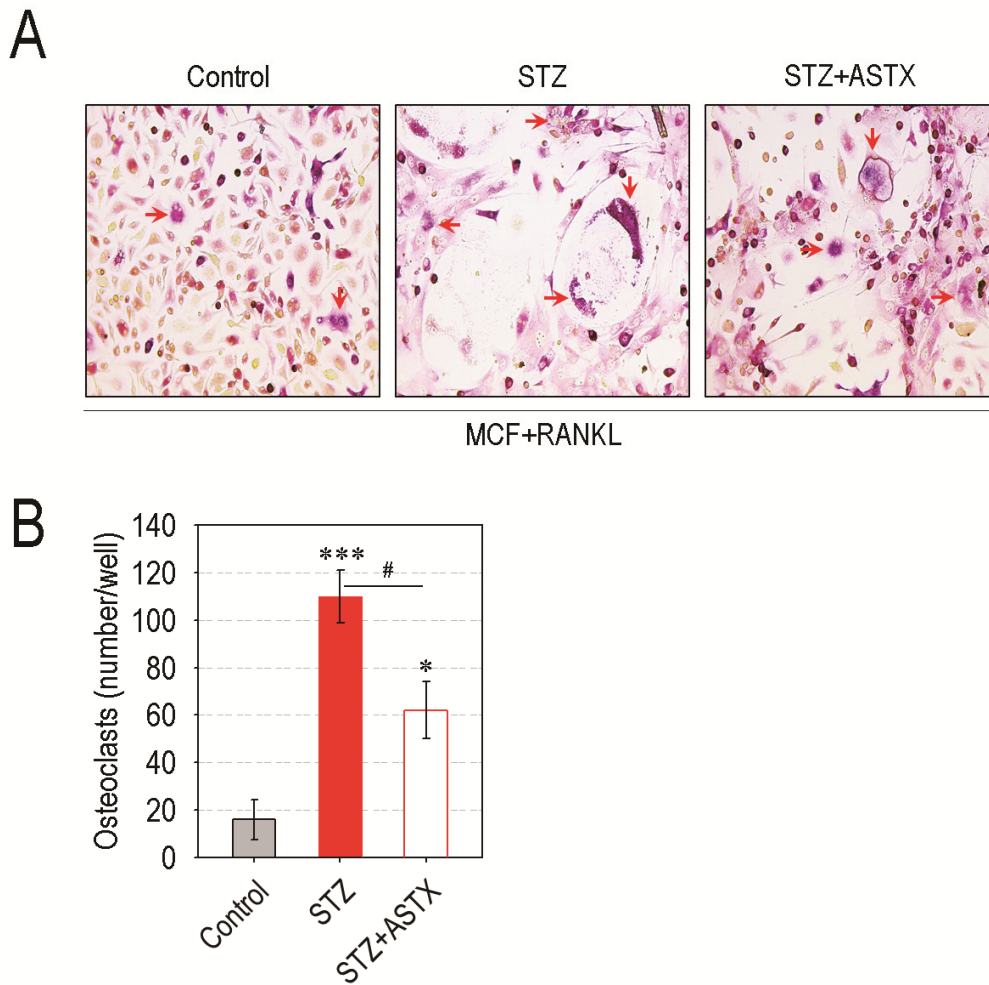


**Figure S2.** The 3D  $\mu$ CT images showing STZ-induced loss of alveolar bone at buccal region of maxillary and mandibular bones.



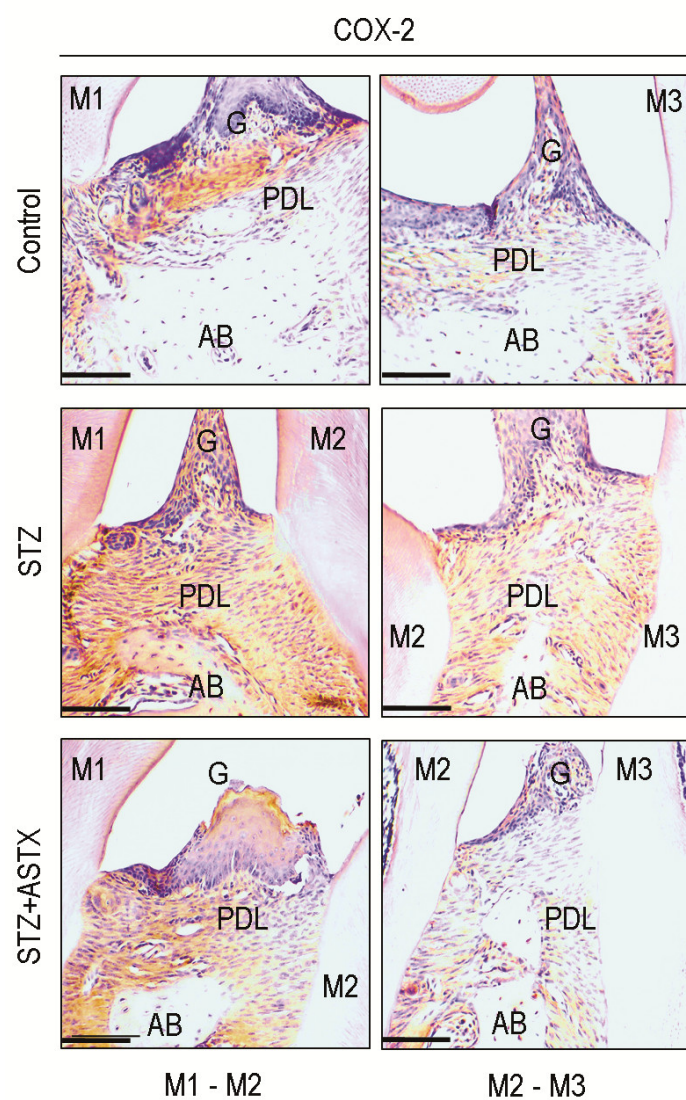
**Figure S3.** IHC staining showing the expression level of CTSK at the region of upper molars of mice groups 60 days after hyperglycemia induction (200× magnification).





**Figure S4.** Bone marrow cells derived from STZ mice exhibit greater osteoclast forming activity than does the cells from control or STZ+ASTX mice.

The non-adherent bone marrow cells were isolated from mice groups 60 days post-hyperglycemia induction and incubated in the presence of M-CSF and RANKL for 7 days. (A) Photograph showing the TRAP-positive multinucleated cells and (B) the number of osteoclasts formed in the cultures. The red arrows indicate osteoclastic cells. \* $p < 0.05$  and \*\*\* $p < 0.001$  vs. control group; # $p < 0.05$  vs. STZ group.



**Figure S5.** IHC staining showing level of COX-2 at the region of upper molars of mice groups 60 days after hyperglycemia induction (200× magnification/Bar = 100  $\mu$ m).