Unraveling mechanism for an amelogenin-derived peptide regulated

hydroxyapatite mineralization via specific functional domain

identification

Yufei Wang^{a, b, 1}, Die Hu^{a, b, 1}, Jingyao Cui^a, Yuhao Zeng^{a,b}, Xinyan Gan^a, Zhongxin Chen^a, Qian Ren^{a,b} and Linglin Zhang^{a, b, *}

^{a.} State Key Laboratory of Oral Diseases& National Clinical Research Centre for Oral Disease, Sichuan University, Chengdu, China

^{b.} Dept. of Cariology and Endodontics West China Hospital of Stomatology, Sichuan University, Chengdu, China

^{1.} These two authors contributed equally to this work.

* Corresponding Author: Linglin Zhang, Professor, Postal Address: No.14, Section 3 of Renmin Road South, Chengdu, China. Telephone: 0086-

028-85503470; E-mail: zhll_sc@163.com



Suppl Figure 1 Langmuir adsorption isotherms of QP5, (QPX)5, (QPX)3 and C-tail (three independent experiment).



Suppl Figure 2 The measure of primary particles for ACPs for control group and the determination of diameters. (min: 99.87; max: 183.66; mean±SD:

132.52±14.95; N: 174)



Suppl Figure 3 The measure of primary particles for ACPs for QP5 group and the determination of diameters. (min: 56.9; max: 109.87; mean±SD:

83.23±11.13; N: 260)



Suppl Figure 4 The measure of primary particles for ACPs for (QPX)5 group and the determination of diameters. (min: 83.64; max: 162.67;

mean±SD: 123.07±15.57; N: 191)



Suppl Figure 5 The measure of primary particles for ACPs for (QPX)3 group and the determination of diameters. (min: 62.89; max: 164.41;

mean±SD: 125.32±17.03; N: 118)



Suppl Figure 6 The measure of primary particles for ACPs for C-tail group and the determination of diameters. (min: 48.72; max: 168.52; mean±SD:

87.98±21.39; N: 422)