

### Description of Additional Supplementary Files

**File:** Supplementary Movie 1

**Description:** crystals growth over time in live PTK2 cells treated with 20  $\mu$ M QPD-OTf.

**File:** Supplementary Movie 2

**Description:** HeLa cells treated with QPD-OTf (20  $\mu$ M, 1.5 hours), washed and imaged over time to observe crystal disappearance.

**File:** Supplementary Movie 3

**Description:** crystals growth from Golgi apparatus in U2OS cells transfected with mCherry-Giantin and treated with 20  $\mu$ M QPD-OTf (magenta: Golgi; cyan: crystal).