**Supplementary Information**

**Supplementary video S1** Video showing human protein deglycase DJ-1 gene (*hDJ-1*)-overexpressing transgenic (TG) dog trying to get up

**Supplementary video S2** 10-m running test of control dogs

**Supplementary video S3** 10-m running test of human protein deglycase DJ-1 gene (*hDJ-1*)-overexpressing transgenic (TG) dog

**Supplementary video S4** Upon hearinghuman voices, the offspring of human protein deglycase DJ-1 gene (*hDJ-1*)-overexpressing transgenic (TG) dog could not get up. It showed a behavior similar to that of the hDJ-1 TG dog.