## chrna7 and stress

9 sentences in 6 studies

## Sentence(s) describing systemic stress (classified using a deep learning model):

- Of these genes, some are critical genes involved in learning and memory, such as cdk5 and chrna7, indicating effects of chronic unpredictable stress on zebrafish memory. PMID:30718621
- For duplications, we found that increased expression of CHRNA7 mRNA is associated with higher expression of nAChR specific and resident ER chaperones, indicating increased ER stress. PMID:29129316
- Stress induced IRI protection was absent in Chrna7 knockout (a7nAChR / ) mice and greatly reduced by destroying or transiently inhibiting C1. PMID:28288124
- The present study examined the association between genetic variation in the nicotinic receptor gene family (CHRNA2, CHRNA3, CHRNA4, CHRNA5, CHRNA6, CHRNA7, CHRNA9, CHRNA10, CHRNB2, CHRNB3, CHRNB4) and the occurrence of posttraumatic stress disorder (PTSD). PMID:26184988
- Therefore, the α7 nicotinic acetylcholine receptor gene (CHRNA7) may be associated with cortisol stress response. PMID:21073885
- Polymorphisms in the CHRNA7 promoter were associated with lower cortisol levels after a small laboratory stress. PMID:21073885
- Our findings also show that although the child's CHRNA7 genotype affects stress response, the maternal genotype has a stronger influence on cortisol release after stress in male offspring. PMID:21073885

## Sentence(s) describing celluar stress (classified using a deep learning model):

- Interestingly, we showed that deletions in KLF13 and CHRNA7 influenced the expression of genes belonging to the same immune/inflammatory and oxidative stress signaling pathways. PMID:25370694
- More interestingly, we show that pathways related to immune/inflammatory response and oxidative stress signaling are affected by the deletion of KFL13 and CHRNA7. PMID:25370694

**Supplementary Figure 3.** One output page in GeneCup displaying sentences retrieved when querying *chrna7* against the keyword *stress*. The sentences describing stress are classified according to its relation to systemic stress or cellular stress by a convolutional neural network. GeneCup retrieved 9 sentences containing chrna7 and stress from 6 studies. Among them, 7 sentences in 5 studies are predicted as a systemic stress sentence and 2 sentences in 1 study are predicted as cellular stress sentences.