

Table S3: Human orthologs and biomedical relevance of characterized *Drosophila* genes.

| Genes | Biological process | Ct and/or Kn | Human ortholog; Biomedical relevance | References |
|------------------------------|--|--------------|--|--|
| <i>RpL7</i> <i>RpL36A</i> | ribosomal regulatory function | Ct/Kn | <i>RpL7</i> <i>RpL36A</i> Autism; ribosomopathies | Klauck et al. 2006; Narla & Ebert, 2010; Armistead & Triggs-Raine, 2014; Zhou et al. 2015 |
| <i>dmn</i> | neurogenesis, microtubule-based transport | Ct | <i>DCTN2</i> ; exacerbate tauopathies (e.g. Alzheimer disease) | Butzlaff et al. 2015 |
| <i>T-cp1</i> <i>CCT2</i> | chaperonin activity | Kn | <i>TCP1</i> <i>CCT2</i> Huntington disease; Gaucher disease; hypoparathyroidism-retardation-Dysmorphism (HRD) syndrome; Kenny-affey syndromes | Tam et al 2006; Parvari et al. 2002 |
| <i>wdb</i> | cytoskeletal regulation, autophagy | Ct/Kn | <i>PPP2R5D</i> ; autosomal dominant mental retardation | Deciphering Developmental Disorders Study, 2015; Shulman & Feany, 2003; Hannan et al. 2016 |
| <i>Ank2</i> | cytoskeletal regulation | Kn | <i>Ank3</i> ; autosomal recessive mental retardation | Iqbal et al 2013; Bi et al. 2012 |

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