centrifugal neuron C2 16-cell germline cyst in germarium region 2a and 2b Johnston organ neuron centrifugal neuron C3 choriogenic main body follicle cell St. 12 Kenyon cell Poxn neuron choriogenic main body follicle cell St. 14 T neuron T2 choriogenic main body follicle cell and corpus luteum T neuron T2a columnar neuron T1 T neuron T3 cone cell T neuron T4/T5 crop T neuron T4/T5a-b crystal cell T neuron T4/T5c-d cyst cell branch a adult Malpighian tubule cyst cell branch b adult Malpighian tubule bar-shaped cell of initial segment cyst cell intermediate adult Malpighian tubule principal cell cyst stem cell distal medullary amacrine neuron Dm3 adult Malpighian tubule principal cell of initial segment adult Malpighian tubule principal cell of lower segment distal medullary amacrine neuron Dm8 adult Malpighian tubule principal cell of lower ureter distal medullary amacrine neuron Dm9 adult Malpighian tubule stellate cell of main segment distal medullary amacrine neuron Dm10 adult abdominal pericardial cell distal medullary amacrine neuron Dm12 adult alary muscle dopaminergic PAM neuron adult antenna glial cell dorsal appendage forming follicle cell adult brain cell body glial cell early cyst cell 1 adult brain perineurial glial cell early cyst cell 2 adult esophagus early elongation stage spermatid adult fat body early-mid elongation-stage spermatid adult glial cell ejaculatory bulb adult heart ventral longitudinal muscle ejaculatory bulb epithelium Cell Types (annotation) adult hindgut ensheathing glial cell adult lamina epithelial/marginal glial cell enteroblast enterocyte of anterior adult midgut epithelium adult midgut enterocyte adult midgut* enterocyte of posterior adult midgut epithelium adult midgut-hindgut hybrid zone enterocyte-like adult neuron enteroendocrine cell adult oenocyte eo support cell adult olfactory receptor neuron Gr21a/63a epidermal cell that specialized in antimicrobial response adult olfactory receptor neuron Ir56a+, Orcoepithelial cell adult olfactory receptor neuron Ir75d escort cell adult olfactory receptor neuron Ir84a, Ir31a, Ir76a, Ir76b, Ir8a, Or35a female reproductive system adult olfactory receptor neuron Or13a follicle cell adult olfactory receptor neuron Or22a, Or42b, Or59b follicle stem cell and prefollicle cell adult olfactory receptor neuron Or47a, Or56a and likely other ORN types gamma Kenyon cell adult olfactory receptor neuron Or47b germ cell stage 4 and later adult olfactory receptor neuron Or65 germline cell adult olfactory receptor neuron Or67a and likely other unknown ORN types germline cell, unknown stage adult olfactory receptor neuron Or67d gustatory receptor neuron adult olfactory receptor neuron Or85a, Or43b gustatory receptor neuron of the labellum adult olfactory receptor neuron Or88a head cyst cell adult olfactory receptor neuron Or92a hemocyte adult olfactory receptor neuron acid-sensing, Ir64a indirect flight muscle adult olfactory receptor neuron acid-sensing, Ir75a/b/c, Ir64a intestinal stem cell adult olfactory receptor neuron unknown type, Orco- labral sense organ mechanosensory neuron adult optic chiasma glial cell lamina intrinsic amacrine neuron Lai adult peripheral nervous system lamina monopolar neuron L1 adult peripheral neuron of the heart lamina monopolar neuron L2 adult pylorus lamina monopolar neuron L3 adult renal stem cell lamina monopolar neuron L4 adult reticular neuropil associated glial cell lamina monopolar neuron L5 adult salivary gland lamina wide-field 1 neuron adult tracheal cell lamina wide-field 2 neuron adult ventral nervous system late cyst cell branch a alpha'/beta' Kenyon cell late cyst cell branch b alpha/beta Kenyon cell late primary spermatocyte antennal lobe projection neuron leg muscle motor neuron leg taste bristle chemosensory neuron anterior ejaculatory duct antimicrobial peptide-producing cell lobula columnar neuron LC10 artefact lobula columnar neuron LC12 lobula columnar neuron LC17 auditory sensory neuron

bitter-sensitive labellar taste bristle

• central main body follicle cell ca. St. 6-8

cardia (1)

cardia (2)

cell body glial cell

btl-GAL4 positive female cell, cluster 1, likely to be ovary cell

btl-GAL4 positive female cell, cluster 2, likely to be ovary cell

btl-GAL4 positive female cell, likely to be ovary cell, sim+, H15+

btl-GAL4 positive female cell, likely to be ovary cell, sim+

cardiomyocyte, working adult heart muscle (non-ostia)

mechanosensory neuron mechanosensory neuron of haltere mechanosensory neuron of leg chordotonal organ medullary intrinsic neuron Mi1 medullary intrinsic neuron Mi4 medullary intrinsic neuron Mi9 medullary intrinsic neuron Mi15 mid-late elongation-stage spermatid mid-late proliferating spermatogonia midgut multidendritic neuron muscle cell neuron of haltere ocellus retinula cell olfactory receptor neuron olfactory receptor neuron, coeloconics optic-lobe-associated cortex glial cell outer photoreceptor cell ovarian sheath muscle ovary cell oviduct pericerebral adult fat mass perineurial glial sheath peripheral glial cell pheromone-sensing neuron photoreceptor photoreceptor cell R7 photoreceptor cell R8 photoreceptor-like pigment cell polar follicle cell post-mitotic endocycling nurse cell post-mitotic germ cell early 16-cell cyst posterior midgut* posterior terminal follicle cell ca. St. 5-8 principal cell* proximal medullary amacrine neuron Pm2 sacculus/arista neuron scolopidial neuron secretory cell of the male reproductive tract seminal vesicle sensory neuron skeletal muscle of head spermatid spermatocyte spermatocyte 0 spermatocyte 2 spermatocyte 3 spermatocyte 4 spermatocyte 5 spermatocyte 6 spermatocyte 7a spermatocyte cyst cell branch a spermatocyte cyst cell branch b spermatogonium spermatogonium-spermatocyte transition stalk follicle cell stretch follicle cell subperineurial glial cell tendon cell tormogen cell transmedullary Y neuron TmY4 transmedullary Y neuron TmY5a transmedullary neuron Tm1 transmedullary neuron Tm2 transmedullary neuron Tm3a transmedullary neuron Tm4 transmedullary neuron Tm5c transmedullary neuron Tm9 transmedullary neuron Tm20 transmedullary neuron Tm29 unannotated visceral muscle of the crop visceral muscle of the midgut

young germ cell

main body follicle cell ca. until St. 5

male accessory gland secondary cell

male accessory gland main cell

male germline differentiating cell

male reproductive tract muscle

male gonad associated epithelium

maxillary palp olfactory receptor neuron

male accessory gland

maxillary palpus