

Supplementary Table 3 Annotations of all age markers and reference gene using in this study. The markers were annotated using BLAST (Basic Local Alignment Search Tool).

Marker	Annotation
A1	No significant similarity found
A2	ref XP_023295602.1 uncharacterized protein LOC111678465 [<i>Lucilia cuprina</i>]
B1	gb KNC21978.1 hypothetical protein FF38_12141 [<i>Lucilia cuprina</i>]
B2	gb KNC23606.1 hypothetical protein FF38_00967 [<i>Lucilia cuprina</i>]
C1	ref XP_023309368.1 fibrous sheath CABYR-binding protein-like [<i>Lucilia cuprina</i>]
C2	ref XP_023309368.1 fibrous sheath CABYR-binding protein-like [<i>Lucilia cuprina</i>]
D1	ref XP_023306098.1 probable chitinase 10 [<i>Lucilia cuprina</i>]
D2	ref XP_023297597.1 seipin [<i>Lucilia cuprina</i>]
F1	gb KNC27587.1 hypothetical protein FF38_05100 [<i>Lucilia cuprina</i>]
F2	gb TMW54454.1 hypothetical protein DOY81_000446 [<i>Sarcophaga bullata</i>]
G1	ref XP_023305727.1 uncharacterized protein LOC111687521 [<i>Lucilia cuprina</i>]
G2	gb KNC30751.1 hypothetical protein FF38_11721 [<i>Lucilia cuprina</i>]
H1	gb KNC29875.1 hypothetical protein FF38_13502 [<i>Lucilia cuprina</i>]
H2	gb KNC24893.1 hypothetical protein FF38_03014 [<i>Lucilia cuprina</i>]
I1	ref XP_023308080.1 splicing factor, arginine/serine-rich 19-like [<i>Lucilia cuprina</i>]
I2	gb KNC32097.1 hypothetical protein FF38_00012 [<i>Lucilia cuprina</i>]
J1	ref XP_023298844.1 neuropeptide-like 3 [<i>Lucilia cuprina</i>]
J2	ref XP_023304353.1 histidine-rich glycoprotein-like [<i>Lucilia cuprina</i>]
K1	ref XP_023306348.1 pupal cuticle protein Edg-78E-like [<i>Lucilia cuprina</i>]
K2	ref XP_023296676.1 beta-glucuronidase isoform X2 [<i>Lucilia cuprina</i>]
L1	gb KNC32423.1 hypothetical protein FF38_04989 [<i>Lucilia cuprina</i>]
L2	ref XP_023309487.1 hornerin [<i>Lucilia cuprina</i>]
M1	ref XP_023301633.1 lectizyme-like [<i>Lucilia cuprina</i>]
M2	ref XP_023295851.1 cuticle protein 18.6 [<i>Lucilia cuprina</i>]
N1	gb KNC31140.1 hypothetical protein FF38_13965 [<i>Lucilia cuprina</i>]
N2	ref XP_023295851.1 cuticle protein 18.6 [<i>Lucilia cuprina</i>]

O1	No significant similarity found
O2	ref XP_023300406.1 vitelline membrane protein Vm26Ab-like [<i>Lucilia cuprina</i>]
R2	ref XP_023309093.1 electron transfer flavoprotein subunit beta [<i>Lucilia cuprina</i>]