

***De novo* predictions of localization of gene expression confirmed by published experiments**

Table 7: **Functional unit aep2egut:** embryonic midgut && anterior midgut primordium && anterior endoderm primordium

Gene name	Prediction Rank	Expression	Reference
<i>ab</i>	4	Anterior and posterior midgut Proventriculus foregut Stomatogastric nervous system ventral midline	Hu <i>et al.</i> [1], Fig.4
<i>nop5</i>	10	Midgut primordium Midgut	Vorbruggen <i>et al.</i> [2], Fig.2
<i>HLHm7</i>	26	Posterior midgut primordium stomatogastric nervous system	Knust <i>et al.</i> [3], Fig.5&7
<i>CG6712</i>	101	Embryonic gut	Lyko <i>et al.</i> [4], Fig.2

References

- [1] Hu S, Fambrough D, Atashi JR, Goodman CS, Crews ST (1995) The drosophila abrupt gene encodes a btb-zinc finger regulatory protein that controls the specificity of neuromuscular connections. *Genes Dev* 9:2936–48.
- [2] Vorbruggen G, Onel S, Jackle H (2000) Restricted expression and subnuclear localization of the drosophila gene dnop5, a member of the nop/sik family of the conserved rna processing factors. *Mech Dev* 90:305–8.
- [3] Knust E, Tietze K, Campos-Ortega J (1987) Molecular analysis of the neurogenic locus enhancer of split of drosophila melanogaster. *EMBO J* 6:4113–412.
- [4] Lyko F, Whittaker AJ, Orr-Weaver TL, Jaenisch R (2000) The putative drosophila methyltransferase gene ddnmt2 is contained in a transposon-like element and is expressed specifically in ovaries. *Mech Dev* 95:215–7.