

## *Drosophila* VMAT and AP{2, 3} yeast two-hybrid assay.

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Some other folks, too many to list.

## AP-2.

- Mammalian AP2 binds clathrin.
- Mutation in alpha-adaptin leads to impaired endocytosis, lack of vesicles & coated pits.
- Alpha-Ada: fly can't walk or fly.
- Mu2 to YXX\* motif interaction.
- Necessary for morphogenesis in *C. elegans*.
- Involved in recycling vesicles (fast?).

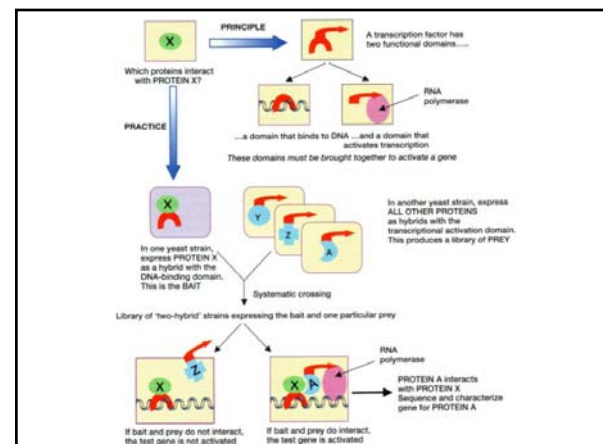
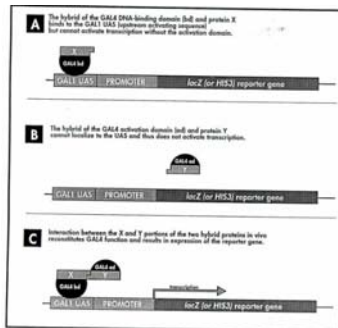
## AP-3.

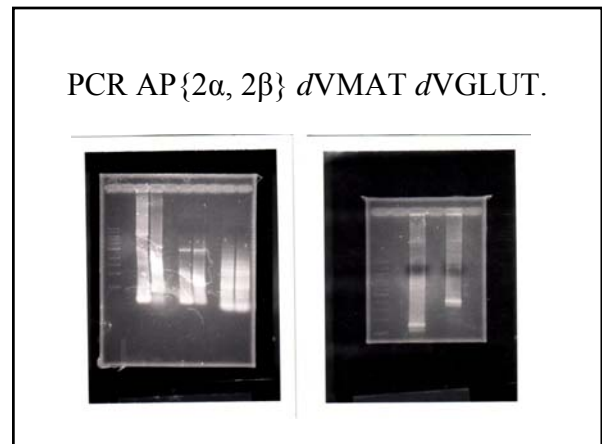
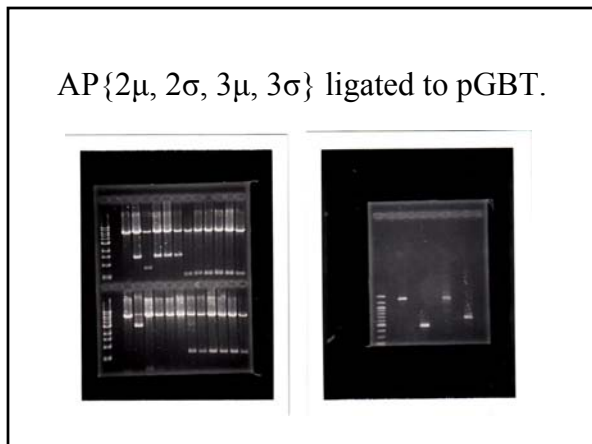
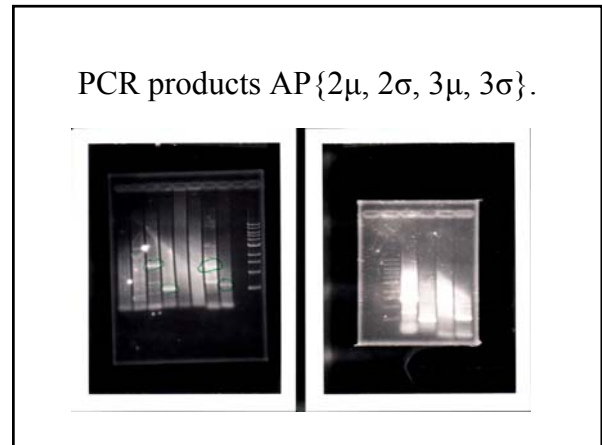
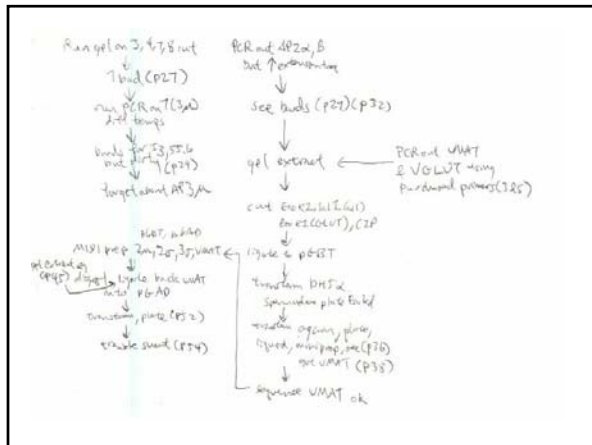
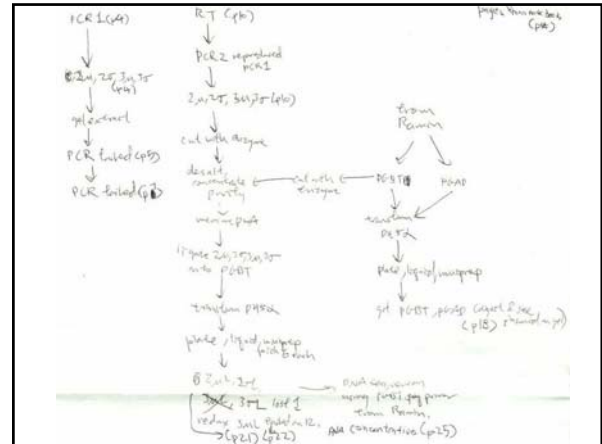
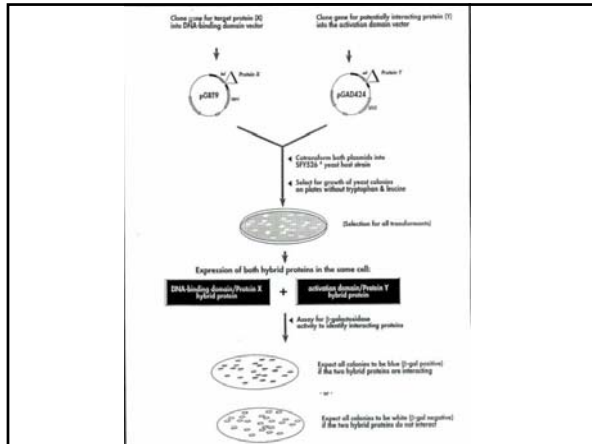
- Pigmentation mutations: reduction in granules in eye cells, defunct sorting.
- Specific, subtle behavioral defects.
- Seizures in mocha mice (zinc?), increased trafficking of lamp{1, 2} to lysosomes.
- Mutate beta3A Hermansky-Pudlak disorder.
- Specific sorting to lysosomes and the like.

## dVMAT.

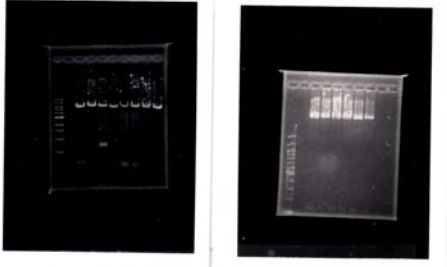
- Transports dopamine > octopamine > 5HT.
- Dileu motif, upstream acidic, acidic patch.
- Reserpine inhibition: motor activity down.
- Overexpress: cocaine-like, lower sensitivity.
- Tourette and ADHD model.
- GAL4 driver lines.

## Yeast two-hybrid.





*d*VMAT ligated to pGBT.



Transfer *d*VMAT to pGAD.

