**ANNOTATION TRIAL #1**

Note: This is a guideline to do the **annotation** **trial**. As for the content of annotation project itself, please read the attached *Annotation\_Guideline\_Gene* file as a reference.

**How-to**

1. Copy-paste the abstract (.txt files) content to ms.word/excel/other text editor
2. Manually separate the abstract sentence by sentence

*1)* *We now demonstrate that ultraspiracle @usp$ , a Drosophila RXR homolog, can substitute for RXR in stimulating the DNA binding of receptors for retinoic acid, T3, vitamin D, and peroxisome proliferator activators.*

*2) These observations led to the search and ultimate identification of the ecdysone receptor @EcR$ as a Drosophila partner of @usp$, together, @usp$ and @EcR$ bind DNA in a highly cooperative fashion*

*3) Cotransfection of both @EcR$ and @usp$ expression vectors is required to render cultured mammalian cells ecdysone responsive.*

*4) These results implicate @usp$ as an integral component of the functional @EcR$ By demonstrating that receptor heterodimer formation precedes the divergence of vertebrate and invertebrate lineages, these data underscore a central role for RXR and its homolog @usp$ in the evolution and control of the nuclear receptor-based endocrine system*

1. Annotate the entity (gene/gene product/protein) by marking them bold

*1)* *We now demonstrate that ultraspiracle* ***@usp$*** *, a Drosophila* ***RXR*** *homolog, can substitute for* ***RXR*** *in stimulating the DNA binding of receptors for retinoic acid, T3, vitamin D, and peroxisome proliferator activators.*

*2) These observations led to the search and ultimate identification of the ecdysone receptor* ***@EcR$*** *as a Drosophila partner of* ***@usp$,*** *together,* ***@usp$*** *and* ***@EcR$*** *bind DNA in a highly cooperative fashion*

*3) Cotransfection of both* ***@EcR$*** *and* ***@usp$*** *expression vectors is required to render cultured mammalian cells ecdysone responsive.*

*4) These results implicate* ***@usp$*** *as an integral component of the functional* ***@EcR$*** *By demonstrating that receptor heterodimer formation precedes the divergence of vertebrate and invertebrate lineages, these data underscore a central role for* ***RXR*** *and its homolog* ***@usp$*** *in the evolution and control of the nuclear receptor-based endocrine system*

1. Highlight with red and blue color the entity pairs that shows the causal relation/ shows a causal evidence between the entities. Provide the relation information in the end of sentence (yellow part).

*1)* *We now demonstrate that ultraspiracle* ***@usp$*** *, a Drosophila* ***RXR*** *homolog, can substitute for* ***RXR*** *in stimulating the DNA binding of receptors for retinoic acid, T3, vitamin D, and peroxisome proliferator activators. à No causal pair*

*2) These observations led to the search and ultimate identification of the ecdysone receptor* ***@EcR$*** *as a Drosophila partner of* ***@usp$,*** *together,* ***@usp$*** *and* ***@EcR$*** *bind DNA in a highly cooperative fashion à Causal relation*

*3) Cotransfection of both* ***@EcR$*** *and* ***@usp$*** *expression vectors is required to render cultured mammalian cells ecdysone responsive. à No causal pair*

*4) These results implicate* ***@usp$*** *as an integral component of the functional* ***@EcR$*** *By demonstrating that receptor heterodimer formation precedes the divergence of vertebrate and invertebrate lineages, these data underscore a central role for* ***RXR*** *and its homolog* ***@usp$*** *in the evolution and control of the nuclear receptor-based endocrine system à Causal evidence*