Erratum

The trappist's approach to pathfinding: elucidating brain wiring using secretory-trap mutagenesis

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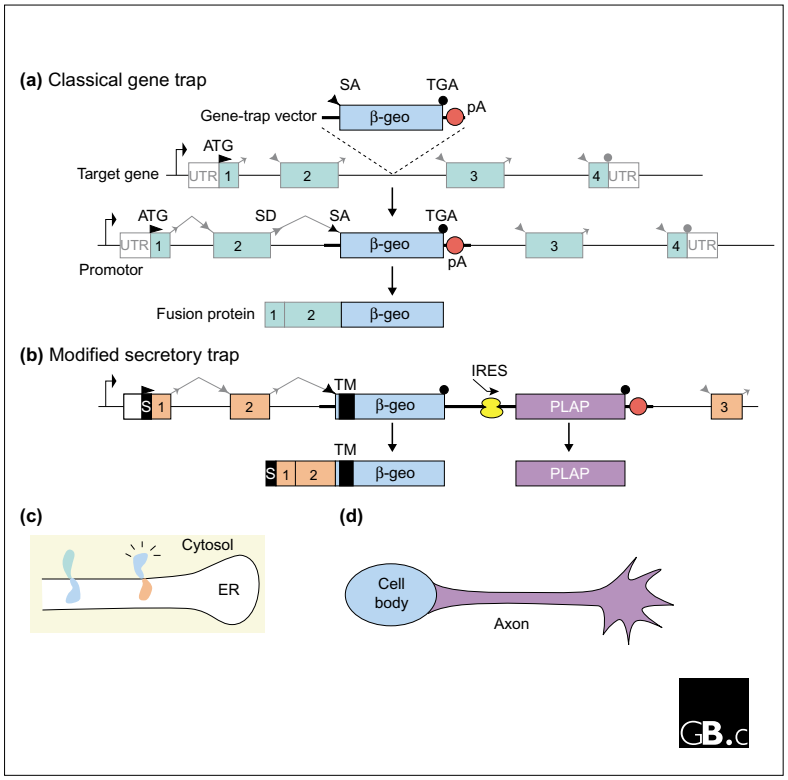
An erratum to **The trappist's approach to pathfinding: elucidating brain wiring using secretory-trap mutagenesis** by AJ Furley. *Genome Biology* 2001, **2:**reviews1026.1-1026.5

In the original version of this article [1], the legend to Figure 1c contained an error. The correct legend is below:



Mechanisms of classical and secretory gene traps. **(a)** In this example, the classical gene-trap vector inserts into a gene (in this case encoding a protein without a leader sequence) between exons 2 and 3. During transcription from the target-gene promoter, the splice-acceptor site (SA) at the 5′ end of β-geo is spliced to the next upstream splice-donor site (SD). The vector polyadenylation signal (pA) stops transcription; a truncated transcript is thus produced that encodes a fusion protein between sequences encoded by exons 1 and 2 of the target gene and β-geo. UTR, untranslated region. **(b)** The modified secretory-trap vector incorporates a transmembrane (TM) domain, an internal ribosome entry site (IRES) and an alkaline phosphatase (PLAP) gene. Only the situation after insertion of this vector into a gene encoding a protein with a hydrophobic leader sequence (S) is shown. A bicistronic transcript is produced, encoding first a fusion between the endogenous protein and β-geo that localizes to the neuronal cell body and second the PLAP protein, which localizes to the entire cell surface, including the axon. **(c)** Modified secretory trap insertions into genes encoding proteins with hydrophobic leaders apparently result in fusion proteins that are inserted into membranes in a type I orientation (right) [12]. This places the β-galactosidase domain of β-geo (blue) in the cytosol, where it is more active than in fusions with leaderless proteins; the latter result in a type II orientation (left) with β-galactosidase in the lumen of the endoplasmic reticulum (ER). **(d)** Expression of β-geo (blue) and PLAP (purple) in a neuron.

1. Furley AJ: **The trappist's approach to pathfinding: elucidating brain wiring using secretory-trap mutagenesis.** *Genome Biol* 2001 **2:**reviews1026.1-1026.5